

HiScale columns

Product Information

Cat#No# Hi-011C

Product Overview

HiScale empty chromatography columns are a family of pressure-stable, easy to pack, columns for medium to high pressure liquid chromatography using a chromatography system.

Description

HiScale is a family of pressure-stable empty columns designed for preparative chromatography, process development, and process validation such as scale-down studies. The user-friendly design allows for an optimized process through simplified and reproducible operation. The range of functional advantages makes HiScale columns well-suited for work that requires ease-of-use, robustness, and process control.

Characteristic

Easy to pack: convenient column measurement scale, nonrotating plunger mechanism, and ergonomically designed components for easier adjustment during column packing.

Pressure-stable: built to withstand pressures up to 20 bar (2 MPa, 290 psi) for compatibility with modern BioProcess resins.

Versatile: dual adapters and axial compression capability allow for a large range of bed heights and column packing protocols.

Variety of column dimensions: choose from 10, 16, 26, or 50 mm inner diameter, and 200 mm or 400 mm length to accommodate bed volumes up to 785 mL.

Scalable: the HiScale column range is designed to facilitate robust process scaleup, as well as cost-efficient and accurate scaledown for applications such as viral clearance studies.

High flexibility: equipped with two adapters allowing for a large range of bed heights.

Maximum operating pressure

20 bar (2 MPa, 290 psi)

Chemical stability

The columns are designed to be used in aqueous solutions and most organic solvents commonly used in liquid chromatography of biomolecules, with the following few exceptions: chlorinated hydrocarbons, acetone

HiScale columns

and other ketones, aliphatic esters, and phenol. Solutions containing more than 2 M NaOH, 1 M HCl, other strong mineral acids, or 75% acetic acid should not be used. The column may be used at temperatures from 4°C to 40°C and at pressures up to 20 bar (2 MPa, 290 psi).

Column i.d.

16 mm

Bed support

Net

Material (bed support)

Polypropylene (PP) (reinforced glass fiber), Polyamide (PA).

Material (column tube)

Borosilicate glass, Polycarbonate, Polyamide (reinforced glass fiber), Ethylene propylene diene polymer (EPDM), Polyoxymetylen (POM), Fluoro-rubber (Viton), Polypropylene, Polyamide (nylon).

Porosity

20 µm

Material (column hardware)

Borosilicate glass, Polycarbonate, Polyamide (reinforced glass fiber), Ethylene propylene diene polymer (EPDM), Polyoxymetylen (POM), Polyether ether ketone (PEEK), Ethylenetetrafluoroethylene (ETFE), Fluoro-rubber (Viton), Polypropylene, Polyamide (nylon).

Tube height

400 mm
