

## 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

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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).

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**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), Polyoxytmetylen (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), Polyoxytmetylen (POM), Polyether ether ketone (PEEK), Etylenetetrafluoroethylene (ETFE), Fluoro-rubber (Viton), Polypropylene, Polyamide (nylon).

**Tube height**

400 mm