

## **Bioline**

Biochromatography equipment

## Bioline HR glass columns

**Bioline high resolution glass columns** offer pressure stability up to 100 bar and a thermostatic jacket for temperatures between 4 °C and 60 °C, making them suitable for a wide range of biochromatography applications. Symmetrical "Uniform Flow" distributors on both ends make reverse flow (up/down flow) possible and minimize peak broadening. The column hardware design allows for easy exchange of frits and compression of the gel bed using the integrated compression screw. Moreover, the columns are equipped with an integrated quick release lever and can be closed with just a few thread rotations.

**Scalable:** Bioline glass columns can easily be adapted to different separation tasks, because they are available in 3 different inner diameters (10, 20, 30 mm), each available in lengths of 30, 60, or 100 cm. For adjusting to the column bed height, the adjustable adaptor offers a maximum displacement of 120 mm. The column can be equipped with up to two adjustable adaptors.

Modular: All column components – including the glass column and the adjustable and fixed adaptors – are also available individually. The tubing is not fixed to the column and is completely exchangeable, allowing you to choose between 1/16" Teflon® (PTFE) or PEEK tubing.

**Durable:** The robust, pressure resistant design of the filling reservoir and finger-tight adaptors ensure safe handling, ease-of-use and longevity.

## **Features**

- chemically inert and biocompatible borosilicate glass
- pressure resistant columns allow for higher flow rates and faster separations
- axial compression and adaption to column bed height via an adjustable adaptor with integrated quick release lever
- "Uniform Flow" distributors on both adaptors make reverse flow possible
- thermostatting jacket, resistant to cooling liquid
- easy to exchange PEEK and PTFE frits (10 µm)



**Technical Data** Wetted materials

Dimensions (ID x length) 10 mm x 100 cm, 20 mm x 100 cm, 30 mm x 100 cm 10 mm x 60 cm, 20 mm x 60 cm, 30 mm x 60 cm

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Max. height of gel bed
Max. pressure

Max. pressure

10 mm ID column 10 MPa
20 mm ID column 10 MPa
30 mm ID column 8 MPa

Temperature range 4−60 °C

**Column tube** borosilicate glass precision glass tube, resistant against buffers and acids as well as HPLC solvents; not for use with hydrofluoric or

phosphoric acid, nor alkaline substances

Cooling jacket PMMA (poly(methyl for use with water + 10% methanol)

methacylate) Playiglas®) (little corrosion with 100% methanol)

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Adaptor: head and

flow distributor PEEK (polyetheretherketone) resistant against buffers and acids as well as HPLC solvents Adaptor shaft stainless steel

(1.4404, 1.4541, and 1.4301) stainless steel, not in contact with eluent

Adaptor fritsØ 10 mm: PEEK, 10 μmPEEK: resistant against buffers and acids as well as HPLC solventsØ 20 mm: PEEK, 10 μmPEEK: resistant against buffers and acids as well as HPLC solventsØ 30 mm: PTFE, 5-9 μmPTFE: resistant against buffer, methanol and acetone, do not

use with acetonitrile

Capillaries, nuts and ferrules 1/16" PEEK resistant against buffers and acids as well as HPLC solvents

## **Ordering information**

Order No.	Dimensions	Quantity
	Complete columns	
A71110	10 mm ID x 30 cm length (10/30)	1 column set with 1 adjustable adaptor
A71120	20 mm ID x 30 cm length (20/30)	1 column set with 1 adjustable adaptor
A71130	30 mm ID x 30 cm length (30/30)	1 column set with 1 adjustable adaptor
	Additional column tube kits, 60 cm length	
A71111	10 mm ID x 60 cm length (10/60)	1 precision glass tube, 1 cooling jacket
A71121	20 mm ID x 60 cm length (20/60)	1 precision glass tube, 1 cooling jacket
A71131	30 mm ID x 30 cm length (30/60)	1 precision glass tube, 1 cooling jacket
	Additional column tube kits, 100 cm length	
A71112	10 mm ID x 100 cm length (10/100)	1 precision glass tube, 1 cooling jacket
A71122	20 mm ID x 100 cm length (20/100)	1 precision glass tube, 1 cooling jacket
A71132	30 mm ID x 100 cm length (30/100)	1 precision glass tube, 1 cooling jacket
	Accessories	
A71190	Filling reservoir with adaptors for 10, 20, 30 mm ID	1 set with filling reservoir 1 liter
A78115	Additional adjustable adaptor, 10 mm ID	1 kit
A78125	Additional adjustable adaptor, 20 mm ID	1 kit
A78135	Additional adjustable adaptor, 30 mm ID	1 kit

Technical data are subject to change without notice.

Visit www.knauer.net for details on complete HPLC systems, HPLC columns, and osmometers.

Wissenschaftliche Gerätebau Dr. Ing. Herbert Knauer GmbH Hegauer Weg 38 14163 Berlin, Germany



Your local distributor:

Phone: +49-(0)30-80 97 27-0
Telefax: +49-(0)30-8 01 50 10
E-Mail: info@knauer.net
Internet: www.knauer.net