

# Column Protection System

the innovative HPLC guard column system



**MACHEREY-NAGEL**

*www.mn-net.com*



*Since 1911*

## Column Protection System HPLC guard column holder

The **Column Protection System** is a universal, easy-to-handle guard column holder system, suitable for all analytical HPLC columns with 1/16" fittings. It offers:

- ideal protection for your analytical main column → significant increase of column life time
- minimized void volume → suitable also for ultra fast HPLC
- special ferrules → pressure stability up to 1034 bar (15 000 psi)
- visual contamination check → in-time changing of the EC guard column

MACHEREY-NAGEL offers corresponding EC guard columns for the Column Protection System filled with specified **NUCLEODUR®**, **NUCLEOSIL®**, **NUCLEOSHELL** and further HPLC adsorbents. Please check [www.mn-net.com](http://www.mn-net.com) for a detailed description of our modern HPLC phases and a listing of EC guard columns corresponding to your analytical main column. RP columns from other manufacturers can be equipped with UNIVERSAL RP guard columns.

### Technic inside

#### EC guard columns

→ ideal protection for analytical main columns

#### Variable connection

→ suitable for all analytical HPLC columns

#### Capillary

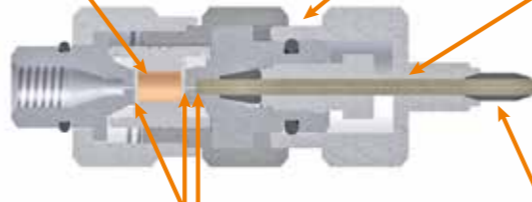
→ 0.12 mm ID for ideal flow

#### Special ferrules

→ pressure stability up to 1034 bar (15000 psi)

#### Minimized void volume

→ suitable for ultra fast HPLC



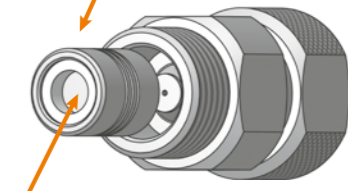
## Column Protection System



Guard column holder and EC guard columns

## Visual Contamination Check

### EC guard column



### Special filter membrane

Replacement of the EC guard column is advised, if the silver membrane is contaminated (bright or dark discoloration), the backpressure rises or the chromatographic performance decreases.

## Ordering Information

REF	Description	Pack of
718966	<b>Column Protection System containing</b>	
	• Cartridge holder	1
	• Capillaries (0.12 mm ID)	2
	• Ferrules	3
	• Wrenches	2
	• Manual	1
REF	Replacement parts	Pack of
718967	Ferrules	5
718968	Replacement connector including O-ring	1
718969	Capillary tubings (0.12 mm ID), nuts and metal ferrules	3
718971	Capillary tubings (0.18 mm ID), nuts and metal ferrules; for higher flow rates	3
718970	Wrench (size 12 and 14 mm)	1
REF	UNIVERSAL RP guard columns	Pack of
728777.20	EC 4/2 UNIVERSAL RP guard column (for 2 mm ID main columns)	3
728778.20	Value pack, as above	9
728777.30	EC 4/3 UNIVERSAL RP guard column (for 3, 4, 4.6 mm ID main columns)	3
728778.30	Value pack, as above	9



For NUCLEODUR®, NUCLEOSIL® and NUCLEOSHELL EC guard columns please check [www.mn-net.com](http://www.mn-net.com).

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