



HPLC HARDWARE



MÖLLER MEDICAL – YOUR PARTNER FOR HPLC HARDWARE

Möller Medical commands 35 years of experience in HPLC hardware. We regard ourselves as problem solver and systems manufacturer for our clients, whom we support from the development phase until series production. We offer:

Large selection of standard HPLC hardware

- Manufacture of HPLC hardware by your specifications and quality requirements
- Wide variety of material qualities
- One-stop shopping: All products and critical process steps from one supplier
- Precision injection moulding with own tool shop
- Cutting, welding, drilling by YAG Laser
- Ultrasound and special cleaning, patented Möller Superfinish for highly clean and smooth interior surfaces
- Long-standing experience in cleaning and packaging of HPLC hardware



THE COMPANY

Möller Medical has been in existence since 1949 and producing components and finished devices for chemical analysis, medical technology and precision engineering for decades. Möller Medical is particularly active in the demanding OEM business; as an ISO 13485:2003 certified manufacturer, we develop and produce components and systems for in-vitro-diagnostics and highly sensitive medical applications.

QUALITY MANAGEMENT

DIN EN ISO 9001

We have been certified since 1994.

DIN EN ISO 13485:2003

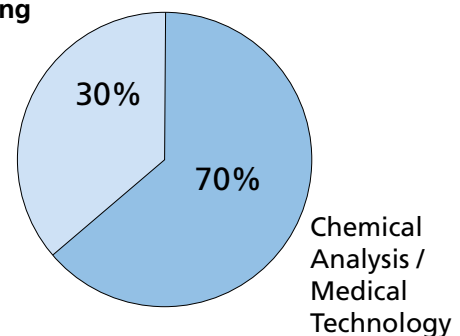
The unlimited certification for medical devices is of vital importance to us; it allows us to act as a manufacturer ("organization") according to the Medizinproduktegesetz (MPG) and deliver end Products or components to distribution partners and OEM customers.

CE-label

For our medical products, we issue the certificate of compliance with EU-directives 98/79/EWG (in-vitro diagnostics) and 93/42/EWG (medical products).

70% of the turnover is generated in chemical analysis and medical technology.

Precision Engineering



Intellectual Property

As a byproduct of our R&D efforts, innovations are constantly generated and protected by roughly 30 patents and utility patents.

FDA approval

Our medical end products are mostly US-FDA-approved. We have in-house know-how of the 510(k)- approval process.

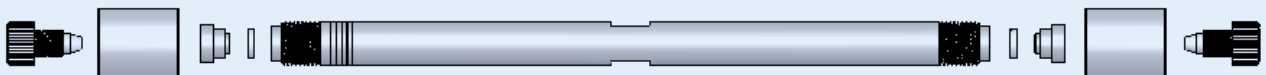
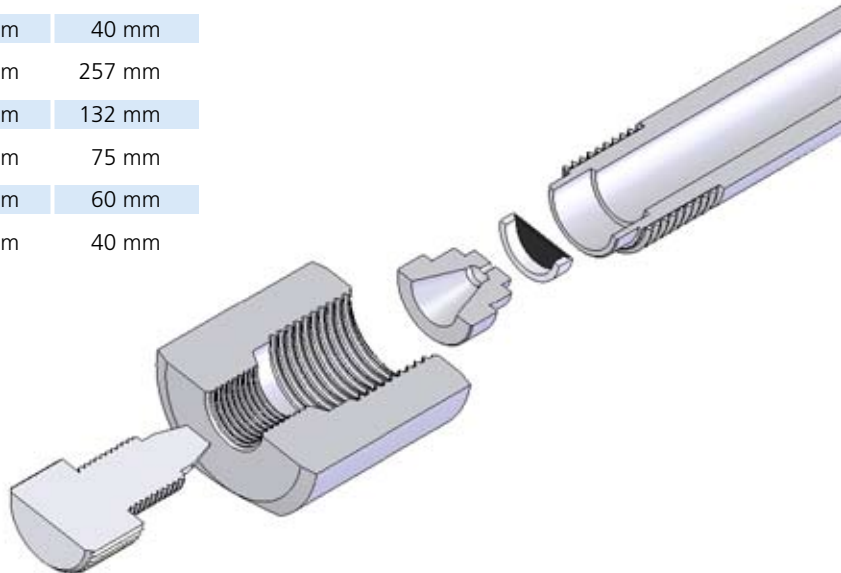
Our quality assurance system guarantees high product standards and reproducibility.

HPLC EMPTY COLUMNS - COMPLETE SYSTEM

ART. NO.	Ø I.D.	EFFECTIVE LENGTH	TOTAL LENGTH
68000093	4.6 mm	250 mm	257 mm
68000094	4.6 mm	125 mm	132 mm
68000095	4.6 mm	68 mm	75 mm
68000096	4.6 mm	53 mm	60 mm
68000097	4.6 mm	33 mm	40 mm
68000098	4.0 mm	250 mm	257 mm
68000099	4.0 mm	125 mm	132 mm
68000100	4.0 mm	68 mm	75 mm
68000101	4.0 mm	53 mm	60 mm
68000102	4.0 mm	33 mm	40 mm
68000103	3.0 mm	250 mm	257 mm
68000104	3.0 mm	125 mm	132 mm
68000105	3.0 mm	68 mm	75 mm
68000106	3.0 mm	53 mm	60 mm
68000107	3.0 mm	33 mm	40 mm
68000108	2.0 mm	250 mm	257 mm
68000109	2.0 mm	125 mm	132 mm
68000110	2.0 mm	68 mm	75 mm
68000111	2.0 mm	53 mm	60 mm
68000112	2.0 mm	33 mm	40 mm

The empty columns complete system includes:

- 1 pc. empty column (stainless steel) with I.D. 2, 3, 4 and 4.6 mm polished / honed interior surface **(column with filter counterboring)**
- 2 pc. filter mesh seal 1µ
- 2 pc. fitting adapter
- 2 pc. HPLC column head
- 2 pc. sealing plug

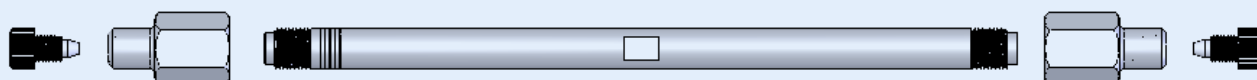
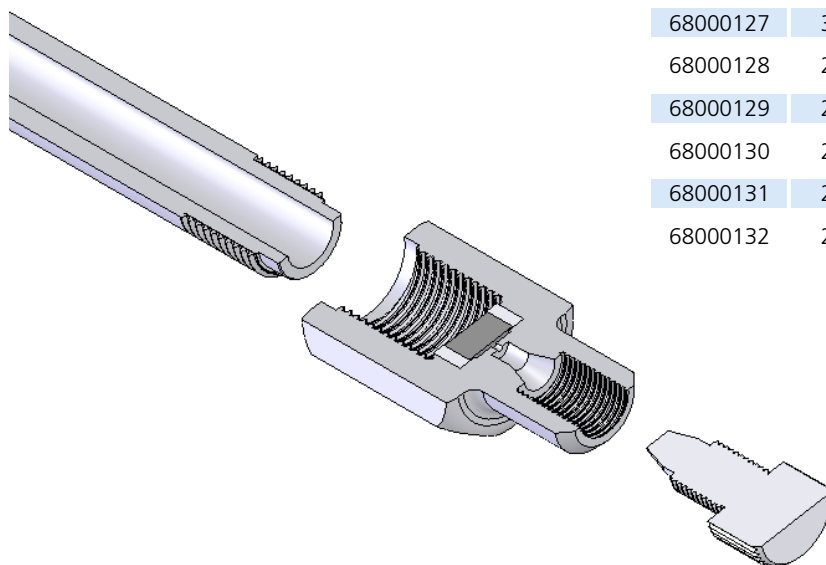


HPLC EMPTY COLUMNS - COMPLETE SYSTEM

The empty columns complete system includes:

- 1 pc. empty column (stainless steel) with I.D. 2, 3, 4 and 4.6 mm polished / honed interior surface
(column without filter counterboring)
- 2 pc. sintered metal frit 3 μ
- 2 pc. end screw connection
- 2 pc. sealing plug

ART. NO.	Ø I.D.	EFFECTIVE LENGTH	TOTAL LENGTH
68000113	4.6 mm	250 mm	250 mm
68000114	4.6 mm	150 mm	150 mm
68000115	4.6 mm	100 mm	100 mm
68000116	4.6 mm	75 mm	75 mm
68000117	4.6 mm	50 mm	50 mm
68000118	4.0 mm	250 mm	250 mm
68000119	4.0 mm	150 mm	150 mm
68000120	4.0 mm	100 mm	100 mm
68000121	4.0 mm	75 mm	75 mm
68000122	4.0 mm	50 mm	50 mm
68000123	3.0 mm	250 mm	250 mm
68000124	3.0 mm	150 mm	150 mm
68000125	3.0 mm	100 mm	100 mm
68000126	3.0 mm	75 mm	75 mm
68000127	3.0 mm	50 mm	50 mm
68000128	2.0 mm	250 mm	250 mm
68000129	2.0 mm	150 mm	150 mm
68000130	2.0 mm	100 mm	100 mm
68000131	2.0 mm	75 mm	75 mm
68000132	2.0 mm	50 mm	50 mm



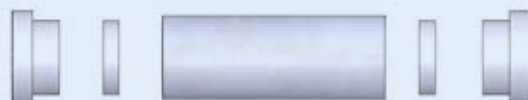
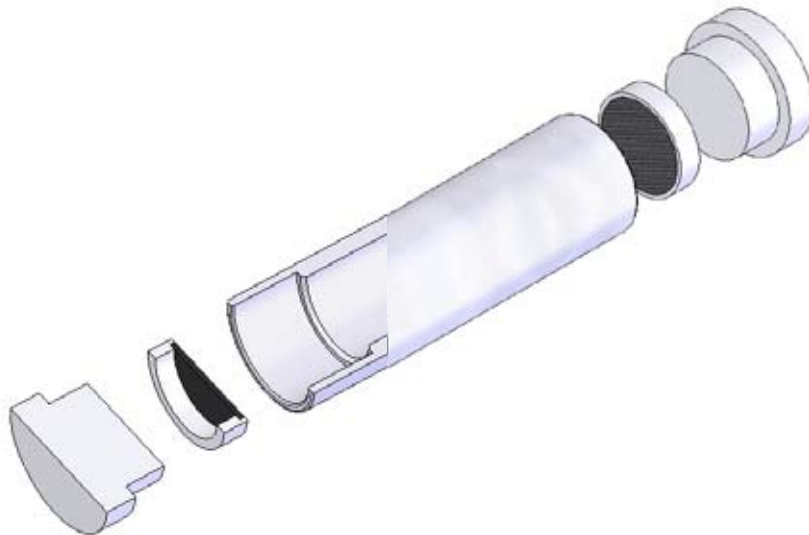
HPLC EMPTY PRECOLUMNS - COMPLETE SYSTEM

ART. NO.	Ø I.D.	EFFECTIVE LENGTH
68000133	4.6 mm	10 mm
68000134	4.6 mm	20 mm
68000137	4.0 mm	10 mm
68000138	4.0 mm	20 mm
68000141	3.0 mm	10 mm
68000142	3.0 mm	20 mm
68000145	2.0 mm	10 mm
68000146	2.0 mm	20 mm

The empty precolumns complete system includes:

- 1 pc. empty precolumn (stainless steel) with I.D. 2, 3, 4 and 4.6 mm
- 2 pc. filter mesh seal 1 μ
- 2 pc. universal sealing plug

set = 10 pc.



MÖLLER MEDICAL SPECIALTIES

MÖLLER NANOCOATINGS

- Surface finishing by nano composite coatings with NanoSkin® coating systems developed in-house
- Coating of the interior volume of thin cannulae/tubes with easy-to-clean coatings
- Class-ceramics-like, biocompatible coatings on the basis of a so-gel process, with excellent chemical and temperature resistance
- About 20 standardized and thoroughly tested coatings available – list is continuously being expanded
- Development of special coatings within a project framework possible on demand

Please refer to our separate brochure on Möller NanoCoatings.



MÖLLER SUPERFINISH®

- Interior surface finishing by a galvanic process developed and patented by Möller
- Resulting in very well polished interior Surfaces with tube geometries down to 0.3 mm x 300 mm

Superfinish-Treatment (magnification x 2000)



before: Ra > 0.7



after: Ra <=0.1

PRECISION INJECTION MOULDING

- Precision injection moulding of various, even autoclavable, plastics (PEEK, PVDF, PFA etc)
- Moulds from our in-house tool shop secure top competence and flexibility for our clients
- Injection-moulding around metal or tube inserts, dead water free fittings

SURFACE REFINEMENT

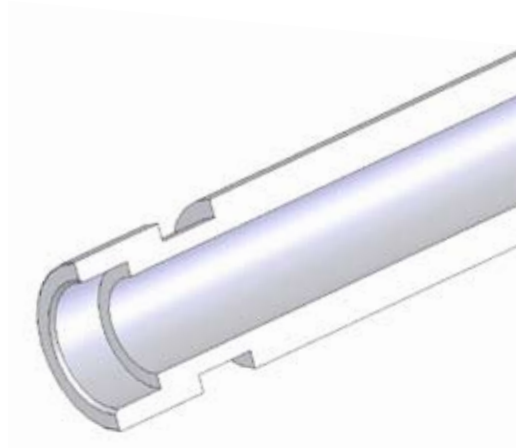
- Surface finishing by galvanics / electro-polishing
- Polishing / honing / SuperFinish®
- Ultrasound cleaning
- Special cleaning of complex capillary and tube geometrics

HPLC EMPTY CARDRIGES

ART. NO.	Ø I.D.	EFFECTIVE LENGTH	TOTAL LENGTH	RING MARKS
68000041	4.6 mm	244.4 mm	250 mm	5
68000042	4.6 mm	119.4 mm	125 mm	5
68000043	4.6 mm	69.4 mm	75 mm	5
68000044	4.6 mm	54.4 mm	60 mm	5
68000045	4.6 mm	34.4 mm	40 mm	5
68000046	4.0 mm	244.4 mm	250 mm	4
68000047	4.0 mm	119.4 mm	125 mm	4
68000048	4.0 mm	69.4 mm	75 mm	4
68000049	4.0 mm	54.4 mm	60 mm	4
68000050	4.0 mm	34.4 mm	40 mm	4
68000051	3.0 mm	244.4 mm	250 mm	3
68000052	3.0 mm	119.4 mm	125 mm	3
68000053	3.0 mm	69.4 mm	75 mm	3
68000054	3.0 mm	54.4 mm	60 mm	3
68000055	3.0 mm	34.4 mm	40 mm	3
68000056	2.0 mm	244.4 mm	250 mm	2
68000057	2.0 mm	119.4 mm	125 mm	2
68000058	2.0 mm	69.4 mm	75 mm	2
68000059	2.0 mm	54.4 mm	60 mm	2
68000060	2.0 mm	34.4 mm	40 mm	2

Empty cardriges (stainless steel)

- polished / honed interior surface
I.D. 2, 3, 4 and 4.6 mm
- double-sided ring groove
- outside diameter 8 mm
- ringmarkings



HPLC EMPTY COLUMNS - WITH AND WITHOUT FILTER COUNTERBORING

ART. NO.	Ø I.D.	EFFECTIVE LENGTH	TOTAL LENGTH	RING MARKS	ART. NO.	Ø I.D.	EFFECTIVE LENGTH	TOTAL LENGTH	RING MARKS
68000001	4.6 mm	250 mm	257 mm	5	68000021	4.6 mm	250 mm	250 mm	5
68000002	4.6 mm	125 mm	132 mm	5	68000022	4.6 mm	150 mm	150 mm	5
68000003	4.6 mm	68 mm	75 mm	5	68000023	4.6 mm	100 mm	100 mm	5
68000004	4.6 mm	53 mm	60 mm	5	68000024	4.6 mm	75 mm	75 mm	5
68000005	4.6 mm	33 mm	40 mm	5	68000025	4.6 mm	50 mm	50 mm	5
68000006	4.0 mm	250 mm	257 mm	4	68000026	4.0 mm	250 mm	250 mm	4
68000007	4.0 mm	125 mm	132 mm	4	68000027	4.0 mm	150 mm	150 mm	4
68000008	4.0 mm	68 mm	75 mm	4	68000028	4.0 mm	100 mm	100 mm	4
68000009	4.0 mm	53 mm	60 mm	4	68000029	4.0 mm	75 mm	75 mm	4
68000010	4.0 mm	33 mm	40 mm	4	68000030	4.0 mm	50 mm	50 mm	4
68000011	3.0 mm	250 mm	257 mm	3	68000031	3.0 mm	250 mm	250 mm	3
68000012	3.0 mm	125 mm	132 mm	3	68000032	3.0 mm	150 mm	150 mm	3
68000013	3.0 mm	68 mm	75 mm	3	68000033	3.0 mm	100 mm	100 mm	3
68000014	3.0 mm	53 mm	60 mm	3	68000034	3.0 mm	75 mm	75 mm	3
68000015	3.0 mm	33 mm	40 mm	3	68000035	3.0 mm	50 mm	50 mm	3
68000016	2.0 mm	250 mm	257 mm	2	68000036	2.0 mm	250 mm	250 mm	2
68000017	2.0 mm	125 mm	132 mm	2	68000037	2.0 mm	150 mm	150 mm	2
68000018	2.0 mm	68 mm	75 mm	2	68000038	2.0 mm	100 mm	100 mm	2
68000019	2.0 mm	53 mm	60 mm	2	68000039	2.0 mm	75 mm	75 mm	2
68000020	2.0 mm	33 mm	40 mm	2	68000040	2.0 mm	50 mm	50 mm	2

**Empty columns (stainless steel)
with filter counterboring**

**Empty columns (stainless steel)
without filter counterboring**


**Empty columns (stainless steel)
with and without filter counterboring**

- polished / honed interior surface
I.D. 2, 3, 4 and 4.6 mm
- double-sided external screw thread
- outside diameter 8 mm
- ringmarkings



ACCESSORIES

set = 10 pc.



UNIVERSAL SEALING PLUG
for columns with filter counterboring
I.D. 2, 3, 4 and 4.6 mm

Art. No. 68000157

set = 10 pc.



FILTER MESH SEAL 1 μ
for columns with filter counterboring
I.D. 2, 3, 4 and 4.6 mm

Art. No. 68000166

set = 10 pc.



SINTERED METAL FRIT 3 μ WITH SEAL
for columns without filter counterboring
I.D. 2, 3, 4 and 4.6 mm

Art. No. 68000161

set = 10 pc.



FILTER MESH SEAL 1 μ
for cartridges
I.D. 2, 3, 4 and 4.6 mm

Art. No. 68000159 \varnothing 4.6 / 4.0
Art. No. 68000160 \varnothing 3.0 / 2.0

set = 10 pc.



SEALING PLUG
10 / 32 UNF

Art. No. 68000158



HPLC COLUMN HEAD
(stainless steel)
for columns with O.D. 8 mm.
bore I.D. 2, 3, 4 and 4.6 mm

Art. No. 68000092



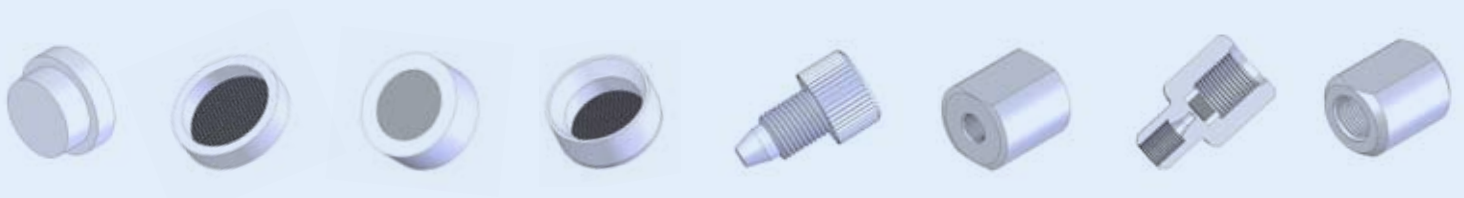
HPLC END SCREW CONNECTION
(stainless steel)
with sintered metal frit 3 μ .
for columns with O.D. 8 mm.
bore I.D. 2, 3, 4 and 4.6 mm

Art. No. 68000091



UNION NUT
(stainless steel)
for columns with O.D. 8 mm.
bore I.D. 2, 3, 4 and 4.6 mm

Art. No. 68000151



ACCESSORIES



**PRECOLUMN HOLDER /
DIRECT COUPLING**
(stainless steel)
for columns 10 mm
incl. thread protector

Art. No. 68000154



EXTENSION PIECE
(stainless steel)
for columns 20 mm

Art. No. 68000152



CONNECTING ELEMENT
(stainless steel)

Art. No. 68000153



SET COMPLETE
for columns 10 and 20 mm
consisting of:
1 pc precolumn holder
1 pc extension piece
1 pc connecting element

Art. No. 68000167



FITTING ADAPTER
(stainless steel)

Art. No. 68000090



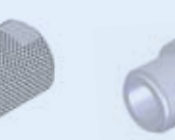
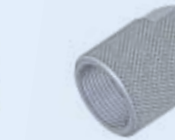
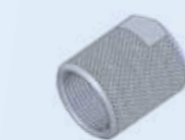
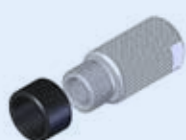
**SET COMPLETE EXTERNAL
CARTRIDGE HOLDER**
with thread 10 / 32 UNF
for capillary

Art. No. 68000168



**SET COMPLETE EXTERNAL
CARTRIDGE HOLDER**
consisting of:
1 pc cartridge holder ext. 10 mm
1 pc cartridge holder ext. 20 mm
1 pc cartridge holder head
2 pc fitting adapter

Art. No. 68000168





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