

Connecting and exchanging KNAUER capillaries (1/16" and 1/8")

This supplement describes how to attach 1/16" and 1/8" capillaries to your HPLC system and which capillaries need to be exchanged when converting the system from 1/16" to 1/8" or vice versa.



Note: When changing the capillaries, refer to the table on page 4 in order to ensure that the correct capillaries are used.

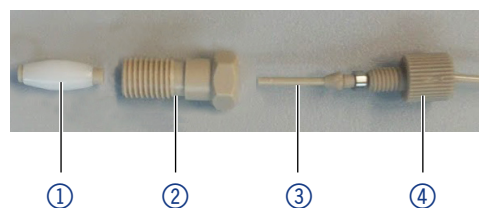
1. Connecting 1/16" capillaries

Tools and material: Box with labeled capillaries and accessories, open-end wrench (10 mm)

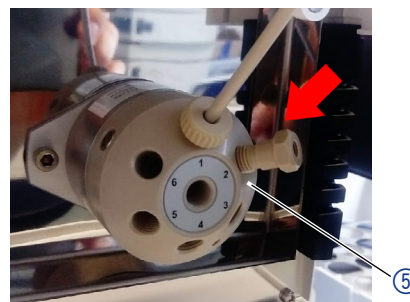
Process

Figure

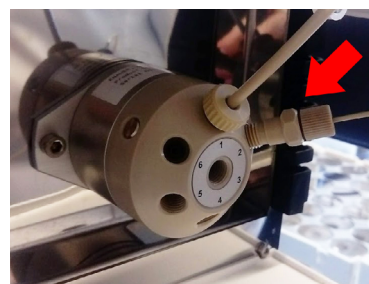
1. Take the cone sealing ring ①, the fitting ② and the capillary ③ with the attached nut ④ out of the box (note that the cone sealing ring includes a short piece of PEEK tubing).
2. Insert the cone sealing ring ① into the fitting ②.



3. Screw the fitting finger-tight into the port of the valve ⑤.
4. Using an open-end wrench (10 mm), further tighten the fitting by a quarter-turn into the port.



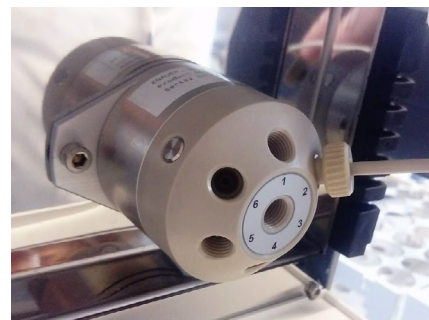
5. Insert the 1/16" capillary ③ into the fitting ②. Tighten the nut ④ finger-tight.



2. Connecting 1/8" capillaries

Tools (optional): Pliers

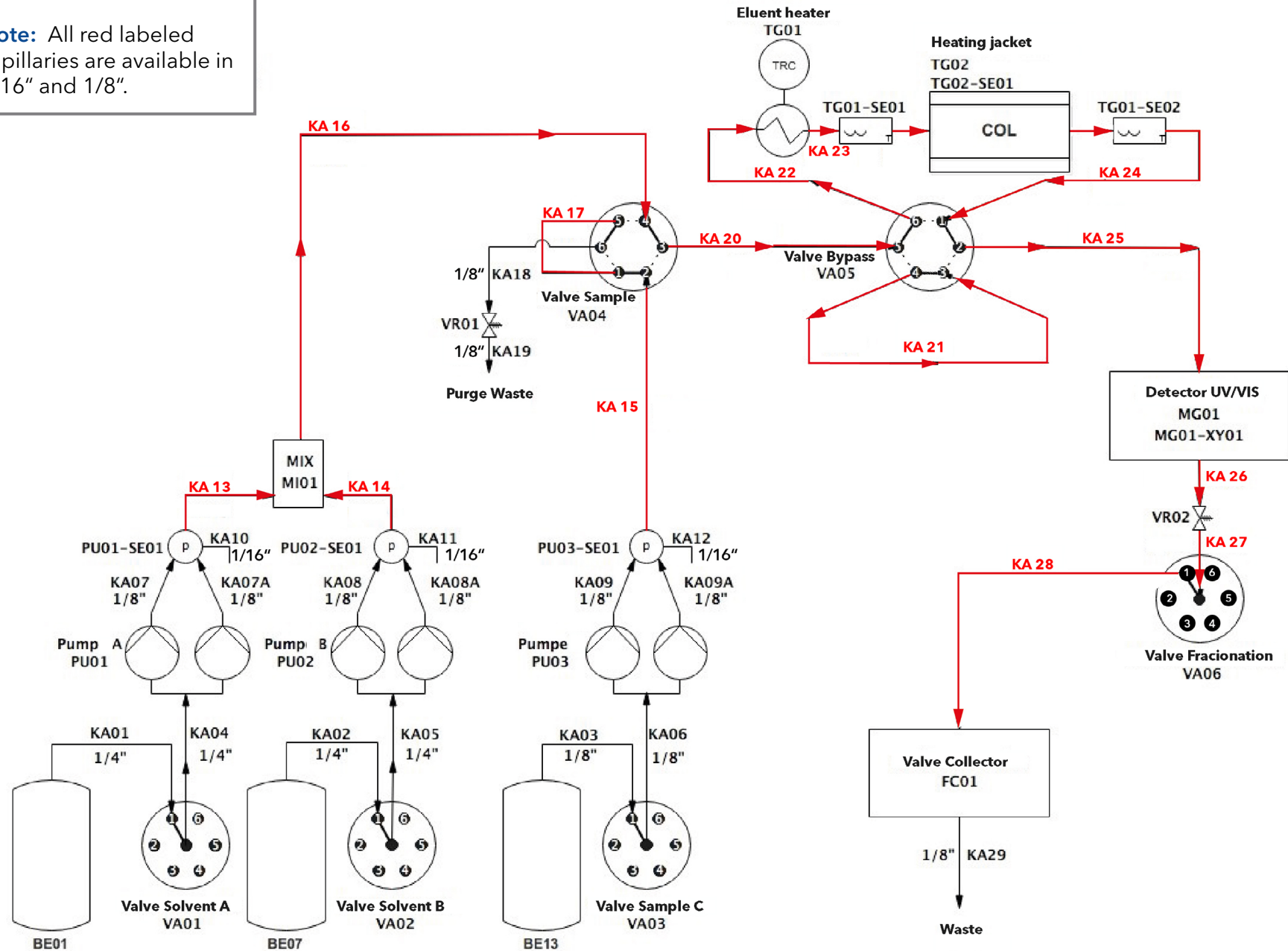
Process	Figure
<ol style="list-style-type: none"> 1. Take the capillary with the attached fitting out of the box. 2. Insert the fitting into the port and screw it in finger-tight. 3. If necessary, further tighten the fitting by a quarter-turn using the pliers (optional). 	



Appendix A: Flow chart



Note: All red labeled capillaries are available in 1/16" and 1/8".



Appendix B: Capillaries and parts that need to be exchanged when modifying the system from 1/16" to 1/8"

Tag No.	Port	Material	OD	ID	Length	Comment
KA13	PU01-SE01 Out → MI01 Port 1	PEEK	1/16"	0,7 mm	50 cm	
KA13b	PU01-SE01 Out → MI01 Port 1	PEEK	1/8"	1,6 mm	58 cm	
KA14	PU02-SE01 Out → MI01 Port 2	PEEK	1/16"	0,7 mm	30 cm	
KA14b	PU02-SE01 Out → MI01 Port 2	PEEK	1/8"	1,6 mm	33 cm	
KA15	PU03-SE01 Out → VA04 Port 2	PEEK	1/16"	0,7 mm	88 cm	
KA15b	PU03-SE01 Out → VA04 Port 2	PEEK	1/8"	1,6 mm	115 cm	
KA16	MI01 Out → VA04 Port 4	PEEK	1/16"	0,7 mm	51 cm	
KA16b	MI01 Out → VA04 Port 4	PEEK	1/8"	1,6 mm	54 cm	
KA17	VA04 Port 5 → VA04 Port 1	PEEK	1/16"	0,7 mm	20 cm	
KA17b	VA04 Port 5 → VA04 Port 1	PEEK	1/8"	1,6 mm	22 cm	
KA20	VA04 Port 3 → VA05 Port 5	PEEK	1/16"	0,7 mm	35 cm	
KA20b	VA04 Port 3 → VA05 Port 5	PEEK	1/8"	1,6 mm	40 cm	
KA21	VA05 Port 3 → VA05 Port 4	PEEK	1/16"	0,7 mm	18 cm	
KA21b	VA05 Port 3 → VA05 Port 4	PEEK	1/8"	1,6 mm	30 cm	
KA22	VA05 Port 6 → TG01 In	PEEK	1/16"	0,7 mm	24 cm	
KA22b	VA05 Port6 → TG01 In	PEEK	1/8" & 1/16"	1,6 mm (1/8") & 0,7 mm (1/16")	33 cm (1/8") & 1 piece 5 cm (1/16")	A short piece of 1/16" capillary is attached to the 1/8" capillary through an adapter. Both ends of the capillary are labeled.
KA23	TG01 Out → Column In	PEEK	1/16"	0,7 mm	47 cm	Both ends of the capillary are labeled.
KA23b	TG01 Out → Column In	PEEK	1/8" & 1/16"	1,6 mm (1/8") & 0,7 mm (1/16")	48 cm (1/8") & 2 pieces 5 cm (1/16")	A short piece of 1/16" capillary is attached to both sides of the 1/8" capillary through an adapter. Both ends of the capillary are labeled
KA24	Column Out → VA05 Port1	PEEK	1/16"	0,7 mm	30 cm	Both ends of the capillary are labeled.
KA24b	Column Out → VA05 Port1	PEEK	1/8" & 1/16"	1,6 mm (1/8") & 0,7 mm (1/16")	41 cm (1/8") & 1 piece 5 cm (1/16")	A short piece of 1/16" capillary is attached to the 1/8" capillary through an adapter. Both ends of the capillary are labeled.
KA25	VA05 Port2 → MG01 In	PEEK	1/16"	0,7 mm	44 cm	
KA25b	VA05 Port2 → MG01 In	PEEK	1/8"	1,6 mm	62 cm	
KA26	MG01 Out → VR02 In	PEEK	1/16"	0,7 mm	26 cm	
KA26b	MG01 Out → VR02 In	PEEK	1/8"	1,6 mm	36 cm	
KA27	VR02 Out → VA06	PEEK	1/16"	0,7 mm	50 cm	
KA27b	VR02 Out → VA06	PEEK	1/8"	1,6 mm	52 cm	
KA28	VA06 Port1 → FC01 In	PEEK	1/16"	0,7 mm	95 cm	
KA28b	VA06 Port1 → FC01 In	FEP	1/8"	2,1 mm	99 cm	