### **Science with Passion**



## Pump head inlet Supplement



Document no. V6844



Note: Please read the corresponding technical documentation for handling and safety reasons.

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## **Product Information**

The product information contain useful and obligatory details about the product, the delivery and the documentation.

## **About the Supplement**

This supplement uses common abbreviations, which are listed below:

Abbreviation	Meaning	
OD	outer diameter	
ID	inner diameter	
A/F	wrench size	
PEEK	polyether ether keton: biocompat- ible material for the pump head inlet	
PCTFE	polychlorotrifluorethylene: bio- compatible material for the ferrule and the nut	

### Intended Use

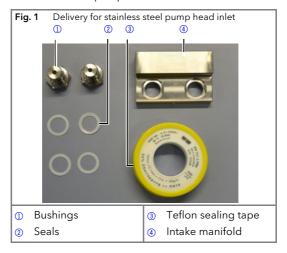
The pump head inlet is an accessory for preparative KNAUER pumps. It spreads solvents entering through a tubing into both pump head channels.

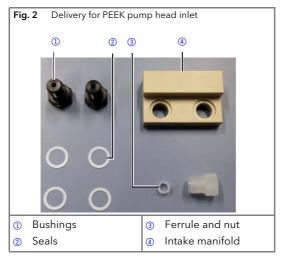
The stainless steel pump head inlet consists of a thread for male connectors with 1/4" NPT outer thread. You can use male connectors for tubings with 1/8" OD, 4 mm OD, or 1/4" OD.

The PEEK pump head inlet consists of a thread for male connectors with 1/2-20 UNF thread. A matching bushing for tubing with 1/4" OD is part of the delivery.

### Installation

Verify that the package is complete according to the packing list before starting the installation. The scope of delivery includes all components that you need for a safe assembly and as a protection from extruding liquids. Subsequently, you find the description on how to connect a 1/4" tubing with the matching male connector to the pump head inlet.





## **Inserting the Seals**

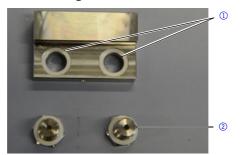
The intake manifold is screwed to the pump head with two bushings through which the eluent flows into the pump head. To guarantee usage without leaks, you have to apply seals on both sides of the intake manifold

### Material

- Four seals
- Intake manifold
- Two bushings

### Process

- 1. Lay two of the seals ① onto the intake manifold.
- 2. Slide the other two seals ② each onto the thread of one bushing.



Lift the intake manifold ③ and guide the bushings through the openings as indicated by the arrow.



### **Next Steps**

Mount the pump head inlet to the pump head.

## Mounting the Pump Head Inlet

Pay attention to the different torques for the bushing which depends on the pump head inlet material:

Material	Torque
Stainless steel	7.5 Nm
PEEK	5 Nm

#### Tools

Torque wrench, size 17

### **Process**

- 1. Fit the pump head inlet ① precisely to the bottom side of the pump head.
- 2. Using the torque wrench ②, tighten the bushing.



### **Next Steps**

Fasten the tubing using the male connector. Find below the description for the stainless steel pump

head inlet, or go to page 10 for the PEEK pump head inlet.

## Attaching the Tubing to the Stainless Steel Pump Head Inlet

KNAUER offers male connectors and tubings in different sizes. You find the order numbers and further details in chapter "Order Numbers" on page 12.

# NOTE The male connector and the tubing are accessories and hence not included with the delivery.

### Material

- Male connector with 1/4" NPT outer thread
- Teflon sealing tape

### **Tools**

Open-end wrench, size 17

### **Process**

1. Cut a small strip off the sealing tape and wrap the thread ① of the male connector.



### **Process**

Screw the male connector ② into the side opening of the pump head inlet. Using the open-end wrench, tighten the stainless steel connector.



### **Next Steps**

Connect the tubing to a solvent bottle. Pay attention to the information in the user manual before taking the pump into operation.

## Attaching the Nut to the PEEK Pump Head Inlet

The nut for the PEEK pump head inlet is part of the delivery.

### Material

- Ferrule
- Nut

### **Process**

 Slide the nut ② with the head up front over the tubing. Afterwards, push the ferrule ① onto the tip of the tubing.



Screw the nut into the side opening of the pump head inlet. Tighten the nut by hand.

### **Next Steps**

Connect the tubing to a solvent bottle. Pay attention to the information in the user manual before taking the pump into operation.

## **Order Numbers**

### Spare parts

Name	Order no.
Pump head inlet, stainless steel	A9861
Intake manifold, stainless steel	G1468
Pump head inlet, PEEK	A9868
Intake manifold, PEEK	G1468A
Ferrule	M2757
Nut	M2758

### Accessories

Name	Order no.
Male connector connection for tubing with 1/4" OD	A58267
Tubing for A58267 PTFE, 1/4" OD, 4.8 mm ID	U0435
Male connector connection for tubing with 4 mm OD	A58268
Tubing for A58268 PTFE, 4 mm OD, 3 mm ID	U0312
Male connector connection for tubing with 1/8" OD	A58269
Tubing for A58269 FEP, 1/8" OD, 2.1 mm ID	U0452

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