

## TECHNICAL INFORMATION

Switching elements	High grade stainless steel
Seal	PTFE-based
Internal volume:	
Inlet side	1.7 µL
Outlet side	1.7 µL
Dead volume	0 µL

## ORDER INFORMATION

CMA 110 Liquid Switch tubing kit	<b>Ref No</b> 8308200 incl.
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## OPTIONAL ACCESSORIES

	<b>Ref No</b>
Tubing Kit	3408550
FEP-tubing 1 m	3409501
FEP-tubing 1 m x 10/pkg	8409501
Tubing Adapters 10/pkg	3409500

For additional information and other Microdialysis accessories, please call your nearest CMA Microdialysis distributor.

9408000 Rev 1.0

## CMA 110 Liquid Switch User's Manual



### CMA Microdialysis AB

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The CMA 110 Liquid Switch has been developed for use in conjunction with the CMA 400 Syringe Pump during microdialysis experiments. The use of the switch will enable selection between three different perfusion fluids without introducing air into the perfusion system.

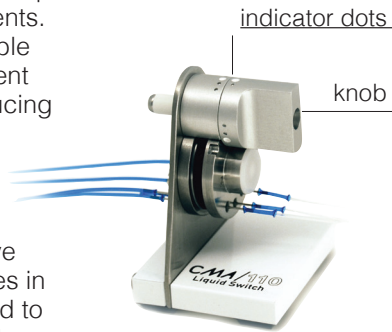


Fig. 1 inlet side

The inlet side of the switch is equipped with three cannulae (Fig.1); the outlet side with five (Fig.2). Each of three syringes in the pump should be connected to a cannula on the inlet side of the switch. The Microdialysis probe or any other destination device should be connected to the center cannula on the outlet side. The remaining four outlet cannulae should be connected to waste. Use the tubing kit delivered with the switch to make the necessary connections.

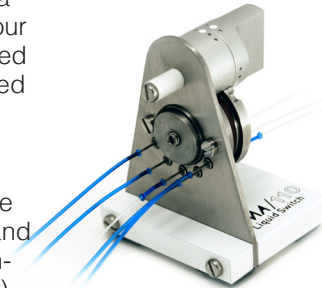


Fig. 2 outlet side

Switching is performed by using the knob. The position of the inlet and outlet cannulae are indicated by lining up the indication dots (Fig.1). When the knob is turned, a resistance power is felt and as the switch moves into the correct position, the knob feels "loose".

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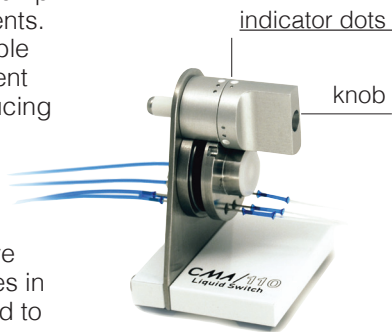


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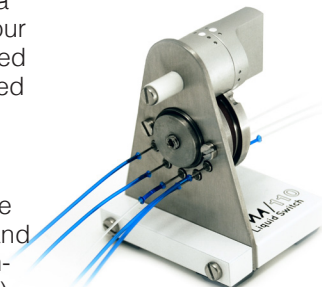


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Fig. 3 is a schematic flow chart which indicates the passages through the switch that are open in the different positions.

NOTE: After use, all the passages in the switch should be rinsed thoroughly with distilled water. This should preferably be followed by drying gently with compressed air. If the switch is not properly rinsed, there is a risk that the passages will become blocked or the sealing surfaces damaged by salt crystals forming when the perfusion fluid evaporates.

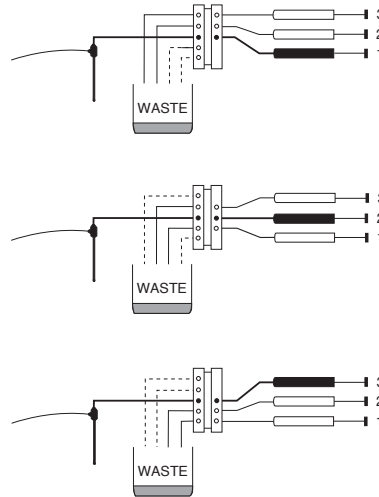


Fig. 3 Schematic flow chart

Properly maintained, the CMA 110 Liquid Switch will last for a long time. In case of malfunction please contact CMA Microdialysis or your nearest distributor for service.

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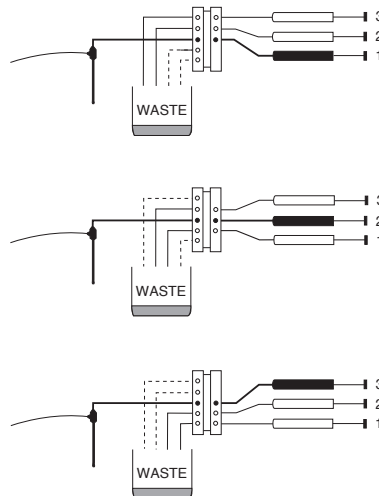


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