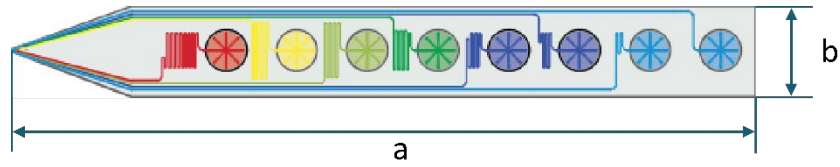


BioPen[®] PRIME Tip Specifications

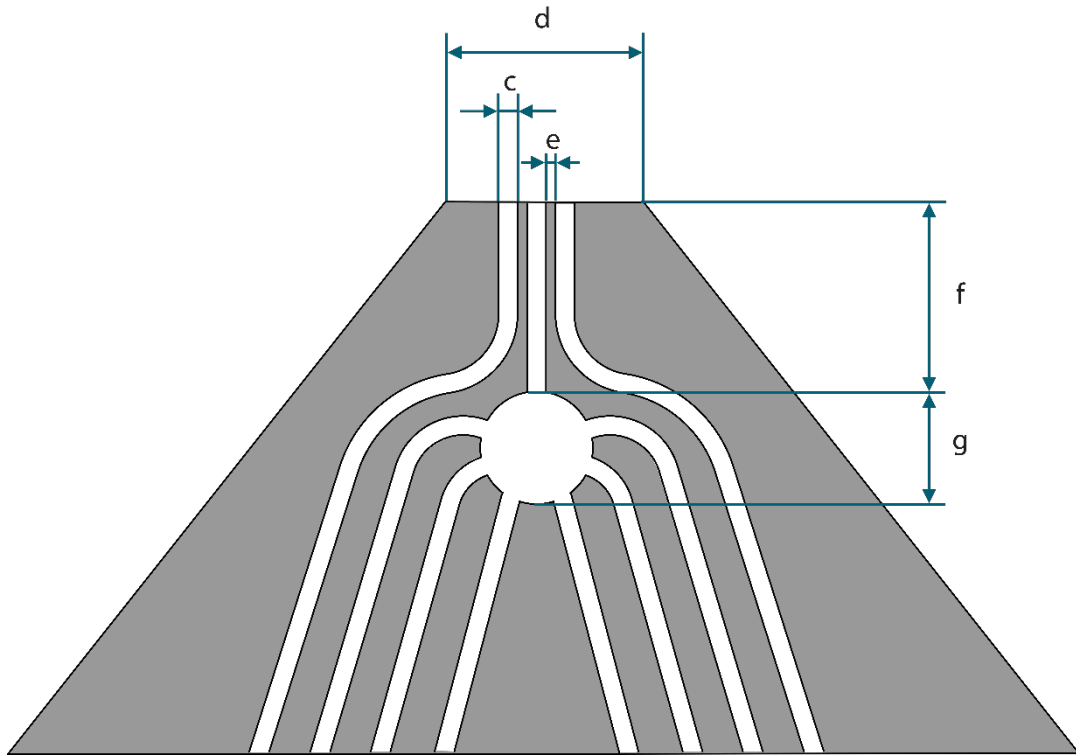
BioPen tip parameters	
Length	65 mm (a)
Width	10 mm (b)
Number of deliverable solutions	4
Reservoir volume	35 μ L
Tip width	450 μ m (d)
Channel size	30*30 μ m (c)
Channel-channel separation at the tip	15 μ m (e)
Channel-bottom separation at the tip	15 μ m
Distance from tip to switching point	350 μ m (f)
Switching point diameter	150 μ m (g)
Exposure length	20 (h)-160 (j) μ m
Exposure width	90 (i)-110 (k) μ m
Exposure volume	0.1-1 nL

Flow setting parameters				
State	Fast	Standard	Slow	Sleep
P _{on} (mbar)	380	190	95	0
P _{off} (mbar)	42	21	11	11
V _{switch} (mbar)	-240	-115	-60	-45
V _{recirc} (mbar)	-240	-115	-60	-45

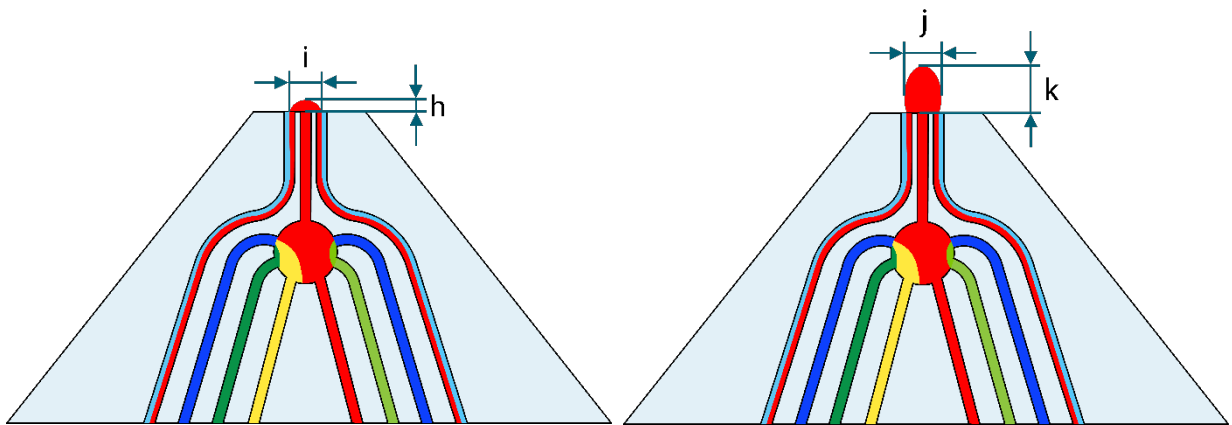
Tip run time					
State		Fast	Standard	Slow	Sleep
Based upon waste wells filling	Flow rate (nL/s)	25	12	7	5
	Duration (min)	45	95	180	240
Based upon solution usage	Duration in Active (min)	25	55	110	-
	Duration in Standby (min)	200	440	880	880



Schematics of BioPen PRIME pipette



Schematics of the tip of BioPen PRIME pipette



BioPen PRIME pipette exposure zone size