

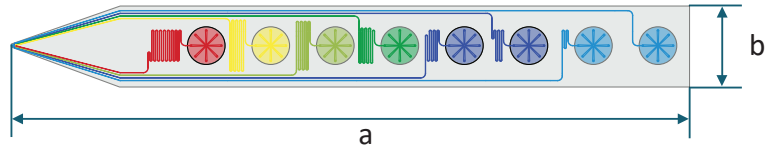


## BioPen® PRIME Tip Specifications

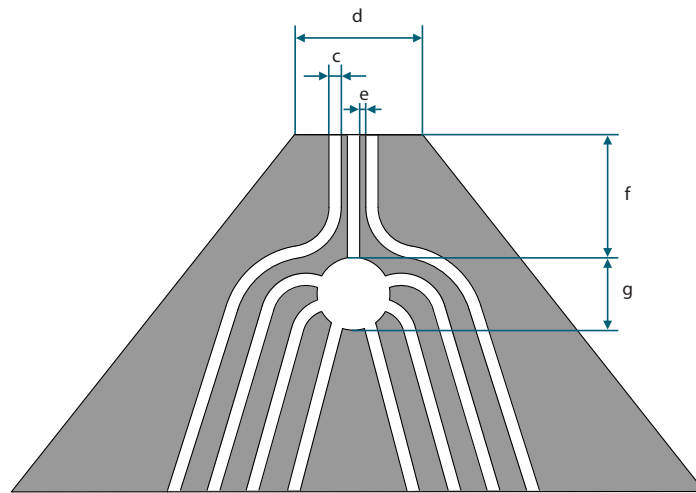
BioPen® tip parameters	
Length	65 mm (a)
Width	10 mm (b)
Number of deliverable solutions	4
Reservoir volume	35 µL
Tip width	450 µm (d)
Channel size	30×30 µm (c)
Channel-channel separation at the tip	15 µm (e)
Channel-bottom separation at the tip	15 µm
Distance from tip to switching point	350 µm (f)
Switching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

Flow setting parameters	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

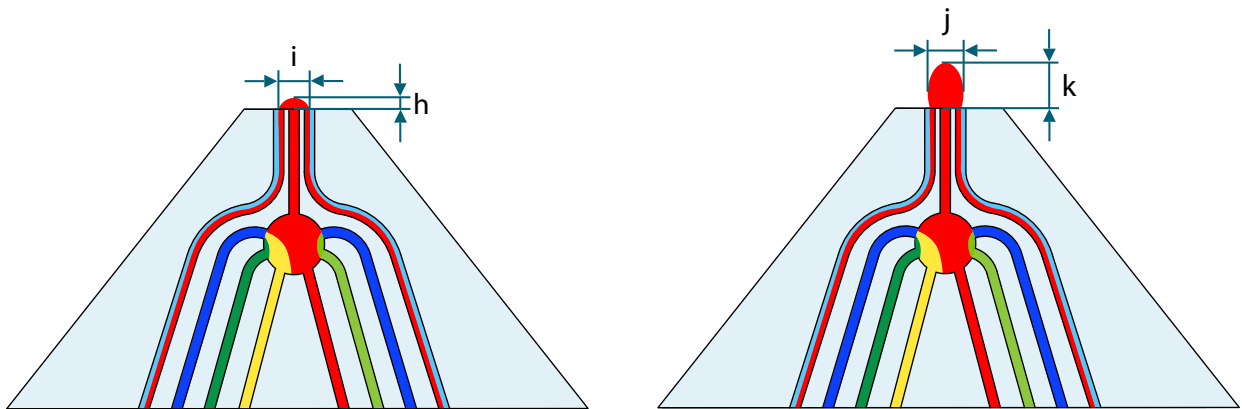
Tip run time		Fast	Standard	Slow	Sleep
Based on waste well filling time	Flow rate (nL/s)	25	12	7	5
	Duration (min)	45	95	180	240
Based on solution use	Duration when active (min)	25	55	110	-
	Duration in standby (min)	200	440	880	880



BioPen® PRIME tip schematics



BioPen® PRIME tip schematics



BioPen® PRIME tip exposure zones