

XenoWorks Digital Injector (BRE) Pressure Settings

Application	Taper Length	Tip Size	Glass Size & Special Note	"Type" in Pipette Cookbook	Compensation Pressure (hPa)	Injection Pressure (hPa)	Injection Pressure (psi)
Adherent Cell Microinjection (5-10µm Neurons)	7-8mm	0.1-0.3µm	Glass: BF100-78-10 Slightly larger tips are needed for injecting beads or quantum dots.	Type C	40-60 hPa	400-1000	6 - 15 psi
Adherent Cell Microinjection (20-40µm Cells)	4-6mm	0.3-0.5µm	Glass: BF100-78-10 or BF100-58-10 Tip may be "tapped off" (broken back) once tip can not be cleared.	Type B	20-40 hPa	200-500	3 - 7.5 psi
Pronuclear Injection	7-9mm	0.3-0.5µm	Glass : BF100-78-10 Tip may be "tapped off" (broken back) once tip can not be cleared.	Type C	20-40 hPa	300-1000	4.5 - 15 psi
C.Elegans	6-8mm	0.5-0.9µm	Glass : BF100-78-10 or BF100-58-10 Tip beveled or broken back to create a 1-3µm opening	Type B	5-10 hPa	50-200	0.75 - 3 psi
Drosophila	6-8mm	0.5-0.9µm	Glass: BF100-78-10 Tip beveled or broken back to create a 1-3µm opening	Type B	5-10 hPa	50-200	0.75 - 3 psi
Zebrafish	6-8mm	0.5-0.9µm	Glass: BF100-78-10 Tip beveled or broken back to create a 1-3µm opening	Type B	5-10 hPa	50-200	0.75 - 3 psi
Xenopus	10-15mm	0.5-0.9µm	Glass: BF100-78-10 Tip beveled or broken back to create a 3-7µm opening	Type D & E	5-10 hPa	20-100	0.3 - 1.5 psi
Sea Urchin Eggs	7-9mm	0.3-0.5µm	Glass: BF100-78-10 Tip beveled or broken back to create a 0.5-2µm opening	Type C	10-20 hPa	20-100	0.3 - 1.5 psi
Small Fish Egg (100-500µm)	8-10mm	0.3-0.5µm	Glass: AF100-64-10 (Aluminosilicate glass) Tip is sometimes broken back to create a 0.5-2µm opening	Type C	10-20 hPa	500-1000 or 200-500 (if broken back)	7.5 - 15 psi or 3 - 7.5 psi
Large Fish Egg (500-1500µm)	8-10mm	0.3-0.5µm	Glass: AF100-64-10 (Aluminosilicate glass) Tip is sometimes broken back to create a 0.5-2µm opening	Type C	10-20 hPa	500-1000 or 200-500 (if broken back)	7.5 - 15 psi or 3 - 7.5 psi