

Ultra[®] 2800 Dispensing System Settings Grid



This guide presents an initial starting point to help you set your specifications on the Ultra 2800 Dispensing System. Settings will vary according to the assembly fluid you are using and the type of deposit you are making. A few reminders:

- Use a tapered tip, especially when dispensing thick fluids. Tapered tips require less pressure and help prevent oozing.
- Use the EFD red pistons, which are designed to engage the plunger. The user needs to press the plunger snugly into the piston during initial setup. If the plunger is not engaged, it causes inconsistent deposits and oozing.
- Use the slowest speed practical to your dispensing application.
- For best results, make small changes to one setting at a time. Dispense again to observe results; adjust as needed.

Suggested Settings/Ultra 2800-30 (30cc syringe barrels)

Sample Deposit Size	Fluid Type and Viscosity	EFD Tip (gauge/color)	Forward Steps	Dispense Rate (cc/s)	Pause (ms)	Pullback Steps
n/a	Alcohol 0.0118cc deposit	Green 18 gauge general purpose tip	37 steps	Medium (0.010240 cc/sec)	0	150 steps
n/a	Alcohol 0.0051cc deposit	Green 18 gauge general purpose tip	16 steps	Medium (0.010240 cc/sec)	0	250 steps
n/a	Alcohol 0.0006cc deposit	Red 25 gauge general purpose tip	2 steps	Medium (0.010240 cc/sec)	0	200 steps
●	EFD red test material 0.0096cc deposit	Olive 14 gauge tapered tip	30 steps	Medium (0.010240 cc/sec)	0	620 steps
•	EFD red test material 0.0009cc deposit	Pink 20 gauge tapered tip	3 steps	Medium (0.010240 cc/sec)	0	630 steps

Suggested Settings/Ultra 2800-10 (10cc syringe barrels)

Sample Deposit Size	Fluid Type and Viscosity	EFD Tip (gauge/color)	Forward Steps	Dispense Rate (cc/s)	Pause (ms)	Pullback Steps
●	EFD red test material 0.0144cc deposit	Olive 14 gauge tapered tip	93 steps	Medium (0.004955 cc/sec)	0	385 steps
•	EFD red test material 0.0030cc deposit	Pink 20 gauge tapered tip	20 steps	Medium (0.004955 cc/sec)	0	400 steps
•	EFD red test material 0.0003cc deposit	Pink 20 gauge tapered tip	2 steps	Medium (0.004955 cc/sec)	0	200 steps

Suggested Settings/Ultra 2800-5 (5cc syringe barrels)

Sample Deposit Size	Fluid Type and Viscosity	EFD Tip (gauge/color)	Forward Steps	Dispense Rate (cc/s)	Pause (ms)	Pullback Steps
●	EFD red test material 0.0100cc deposit	Olive 14 gauge tapered tip	100 steps	Medium (0.003211 cc/sec)	0	400 steps
●	EFD red test material 0.0046cc deposit	Pink 20 gauge tapered tip	46 steps	Medium (0.003211 cc/sec)	0	450 steps
•	EFD red test material 0.0003cc deposit	Red 25 gauge tapered tip	3 steps	Medium (0.003211 cc/sec)	0	300 steps

Suggested Settings/Ultra 2800-3 (3cc syringe barrels)

Sample Deposit Size	Fluid Type and Viscosity	EFD Tip (gauge/color)	Forward Steps	Dispense Rate (cc/s)	Pause (ms)	Pullback Steps
●	EFD red test material 0.0044cc deposit	Olive 14 gauge tapered tip	77 steps	Medium (0.001829 cc/sec)	0	148 steps
●	EFD red test material 0.0017cc deposit	Green 18 gauge general purpose tip	30 steps	Medium (0.001829 cc/sec)	0	220 steps
•	EFD red test material 0.0003cc deposit	Red 25 gauge tapered tip	6 steps	Medium (0.001829 cc/sec)	0	340 steps

Recommended Customer Settings

Unit: Ultra 2800-3 Ultra 2800-5 Ultra 2800-10 Ultra 2800-30

Fluid Type and Viscosity	EFD Tip (gauge/color)	Forward Steps	Dispense Rate (cc/s)	Pause (ms)	Pullback Steps



USA: 800-556-3484 or +1-401-434-1680
 Europe: 0800 585733 or +44 (0) 1582 666334
 Asia: +86 (21) 5854 2345
 technical@efd-inc.com www.efd-inc.com