

Selected Precision Tubing Flow Rates for FREEDOM60®

Tubing Set (rate mL/h)	Syringe Volume					
	Time for 10 mL	Time for 20 mL	Time for 30 mL	Time for 40 mL	Time for 50 mL	Time for 60 mL
F2 (2 mL/h)	5 h	10 h	15 h	20 h	25 h	30 h
F3 (3 mL/h)	3 h 20 min	6 h 40 min	10 h	13 h 20 min	16 h 40 min	20 h
F3.8 (3.8 mL/h)	2 h 38 min	5 h 16 min	7 h 54 min	10 h 32 min	13 h 10 min	15 h 48 min
F5 (5 mL/h)	2 h	4 h	6 h	8 h	10 h	12 h
F8 (8 mL/h)	1 h 15 min	2 h 30 min	3 h 45 min	5 h	6 h 15 min	7 h 30 min
F10 (10 mL/h)	60 min	2 h	3 h	4 h	5 h	6 h
F30 (30 mL/h)	20 min	40 min	60 min	1 h 20 min	1 h 40 min	2 h
F45 (45 mL/h)	13 min	27 min	40 min	53 min	67 min	80 min
F60 (60 mL/h)	10 min	20 min	30 min	40 min	50 min	60 min
F120 (120 mL/h)	5 min	10 min	15 min	20 min	25 min	30 min
F180 (180 mL/h)	3.5 min	6.7 min	10.5 min	14 min	17.5 min	21 min
F275 (275 mL/h)	2.2 min	4.4 min	6.5 min	8.7 min	11 min	13 min

Times are approximate. Flow rates shown above resulted from tests performed using 0.9% saline solution at room temperature in a controlled laboratory.

Pharmacy Sample Calculations - FREEDOM60®

Product	Dose	Concentration	Total Volume	Approximate Delivery Time	Delivery Rate (mL/h)	Final Medication Delivery Rate (mg/min)	Precision Tubing Set
Rocephin® (ceftriaxone)	1 g	40 mg/mL	25 mL	33 min	45	30.30 mg/min	F45
	1 g	100 mg/mL	10 mL	40 min	15	25.00 mg/min	F15
	2 g	40 mg/mL	50 mL	67 min	45	29.85 mg/min	F45
	2 g	100 mg/mL	20 mL	80 min	15	25.00 mg/min	F15
Vancomycin	1 g	16.7 mg/mL	60 mL	60 min	60	16.67 mg/min	F60
	1 g	16.7 mg/mL	60 mL	80 min	45	12.50 mg/min	F45
	1 g	16.7 mg/mL	60 mL	120 min (2 h)	30	8.33 mg/min	F30
	1.5 g	25 mg/mL	60 mL	120 min (2 h)	30	12.50 mg/min	F30

Times are approximate and referenced for adult patients only. Pharmacy should verify that the final concentration and administration rates are within their protocols and adjust the F-Tubing as necessary to obtain the desired infusion time.