

KDS230



Ideal for applications requiring multiple syringes, the KDS230 is an adaptation of the KDS210. The pump has been modified to hold up to 10 syringes.

Features

- Multiple syringe holder:
 - One to ten syringes, 10 μ l - 10 ml
 - One to six syringes, 20 ml - 60 ml
 - One to four syringes, 100 ml - 140 ml
 - Withdrawal then infusion Backlit LCD display
- Knob locks/unlocks drive block for effortless, drag-free adjustment
- Simple menu-driven setup:
 - select syringe size from displayed table
 - dispense volume
 - dispense flow rate
- Continuous dispense volume display
- Preset volume control and automatic shut-off
- Settings can be reviewed or changed during operation
- Stall detection
- Choice of unit selection
- Last settings stored in permanent memory
- Built-in RS-232C interface for computer "daisy chaining" up to 100 pumps
- TTL interface for foot switch, timer, relay control, outputs for run indicator, valve control
- Independent rate and volume settings for infusion and withdrawal
- Multiple mode selection:
 - Infusion
 - Withdrawal
 - Infusion then withdrawal
 - Withdrawal then infusion
 - Continuous cycle
- Optional keypad programmable feature ([KDS230P](#))

Specifications		Flow Rates		
Pump Type:	<ul style="list-style-type: none"> Infusion / Withdrawal 	Syringe	Minimum	Maximum
Max. No. of Syringes	<ul style="list-style-type: none"> Ten 	10 ml	0.001 ml/h	22.98 ml/min
Syringe Size	<ul style="list-style-type: none"> 10 μl to 140 ml 	25 ml	0.001 ml /h	60.68 ml/min
Dimensions	<ul style="list-style-type: none"> 11 x 9 x 5.5 in. 28 x 23 x 1414 cm 	50 ml	0.001 ml/h	105.8 ml/min
Weight	<ul style="list-style-type: none"> 9 lb (4 kg) 	100 ml	0.001 ml /h	212.6 ml/min
Linear Force	<ul style="list-style-type: none"> 40 lb (18 kg) 	250 ml	0.001 ml/h	527.6 ml/min
Advance Per Microstep	<ul style="list-style-type: none"> 0.165 micron (1/16 step) 	500 ml	0.001 ml /h	1.06 ml/min
Max Step Rate (1/2 Step)	<ul style="list-style-type: none"> 1600/sec 	1 ml	0.001 ml/h	2.203 ml/min
Min Step Rate	<ul style="list-style-type: none"> 1 step / 30 sec. 	3 ml	0.001 ml /h	7.36 ml/min
Accuracy	<ul style="list-style-type: none"> \pm < 1% 	5 ml	0.001 ml/h	14.33 ml/min
Reproducibility	<ul style="list-style-type: none"> \pm 0.1% 	10 ml	0.001 ml /h	20.91 ml/min
Audible Alarm	<ul style="list-style-type: none"> (Optional) ** 	20 ml	0.001 ml/h	36.19 ml/min
		30 ml	0.001 ml /h	46.49 ml/min
		60 ml	0.001 ml/h	70.57 ml/min
		140 ml	0.001 ml /h	147 ml/min