## KDS200



Two-Syringe Infusion Pump This feature-laden two-syringe infusion pump combines a broad speed range and holds a wide range of syringe sizes to meet the requirements of virtually any laboratory application

## **Features**

- Holds one or two syringes, 10 μl to 140 ml each
- Backlit LCD display
- Knob locks/unlocks drive block for effortless, drag-free manual adjustment
- Simple menu-driven setup:
  - o select syringe size from displayed table
  - o dispense volume
  - o dispense flow rate
- Continuous dispense volume display
- Preset volume control and automatic shut-off
- Choice of unit selection
- Settings can be reviewed or changed during operation
- Stall detection
- Last settings stored in permanent memory
- Built-in RS232C interface for computer "daisy chaining" up to 100 pumps
- TTL interface for foot switch, timer, relay control, outputs for run indicator, valve control
- Optional multi-step keypad programmable feature (KDS200P)

<b>Specifications</b>	
Pump Type:	• Infusion
Max. No. of Syringes	• Two
Syringe Size	• 10 µl to 140 ml
Dimensions	• 11 x 9 x 5.5 in. • 28 x 23 x 1414 cm
Weight	• 9 lb (4 kg)
Linear Force	• 40 lb (18 kg) min.
Advance Per Microstep	• 0.165 micron (1/16 step)
Max Step Rate (1/2 Step)	• 1600/sec
Min Step Rate	• 1 step / 30 sec.
Accuracy	• ± < 1%
Reproducability	• ± 0.1%
Audible Alarm	• (Optional) **

Flow Rates		
Syringe	Minimum	Maximum
10 ml	0.001 ml/h	22.98 ml/min
25 ml	0.001 ml /h	60.68 ml/min
50 ml	0.001 ml/h	105.8 ml/min
100 ml	0.001 ml /h	212.6 ml/min
250 ml	0.001 ml/h	527.6 ml/min
500 ml	0.001 ml /h	1.06 ml/min
1 ml	0.001 ml/h	2.203 ml/min
3 ml	0.001 ml /h	7.36 ml/min
5 ml	0.001 ml/h	14.33 ml/min
10 ml	0.001 ml /h	20.91 ml/min
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