



IPS-13R Syringe Pump

Simultaneous Dual Channel Infusion/Withdrawal Pump

The IPS-13R supports infusion and withdrawal on two synchronized channels. Each operates together with adjustable flow rate and direction. A practical choice for processes that require coordinated, bidirectional control.

- 4.3" intuitive touch display
- Dual synchronized infusion and withdrawal operation
- Adjustable flow direction and rate for both channels

SYRINGES	
CAPACITY	2 Interdependent
TYPE	Glass, plastic, steel
MIN SIZE	Hamilton 0.5 µl (ID:0.103mm)
MAX SIZE	Monoject 140 ml (ID:38mm)
FLOW RATE	
MIN	17,89 pl/min (Hamilton 0.5 µl)
MAX	121,51 ml/min (140 ml Monoject Syringe)
ACCURACY	< 1%
REPRODUCIBILITY	< 1%
MOTOR SPESIFICATIONS	
MOTOR TYPE	Stepper Motor
MOTOR DRIVE CONTROLLER	Microcontroller with Microstep Drive
STEP RESOLUTION (TRAVEL/MICROSTEP)	357 nm/µstep
MIN STEP RATE	10 sec/µstep
MAX STEP RATE	200 µsec/µstep
MIN LINEAR SPEED	2,14 µm/min
MAX LINEAR SPEED	107,14 µm/min
LINEAR FORCE	20 kg (each syringe:15 kg)
GENERAL SPESIFICATIONS	
RECIPE SAVE-RECALL	No
POWER SUPPLY	12 VDC 1A (110-240 VAC adapter included)
DIMENSIONS	W:211 L:250 H:143 mm
WEIGHT	3.2 kg
OPERATING CONDITIONS	
OPERATING TEMPERATURE	Between -10 and 50 (°C)
STORAGE TEMPERATURE	Between -30 and 85 (°C)
OPERATING HUMIDITY	RH 10% - RH 90% (not condensed)
STORAGE HUMIDITY	RH 10% - RH 90% (not condensed)