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YOUR SUPPLIER FOR ALL LABORATORY NEEDS

The Legacy series



The Legacy series is the foundation for all Syringe Pumps. The Legacy pumps are acknowledged as the industry's highest valued solution for delivering precise and smooth flow in research, pilot plants and production applications. Simple and easy to use, these pumps are the favorite of research scientists and engineers. They use the Model 100/ Model 200 syringe pumps more than any other for their outstanding reliability and performance. The Model 100 series pumps give customers the most cost effective solution for infusing fluids. Alternatively, the Model 200/ Model 400 series give the customer advanced features with RS232 and TTL interfaces. All Model 200/ Model 400 series pumps can be daisy chained together to create a pumping network.

General Features Available on ALL Legacy pumps:

- Vibration Elimination System
- Flow Direction Indicator
- Fast Forward/Reverse
- Antisiphon Clamp (I/W Models only)
- CE Approved Model 100 series are ETL listed and conforms to ANSI/UL Standard 61010-1:2004 2ND ED. Certified to CAN/CSA STD C22.2NO.61010.1:2004 2ND ED
- Power Recovery Diagnostics
- Optional Foot Pedal Interface
- NIST Certificate Option
- Alarm Option
- CE Approved Models

Basic Programming

- Syringe Library
- Flow Rate Selection
- Volume Dispense Mode
- Direct Entry Syringe Diameter

Standard on Model 200/Model 400 Pumps

- Daisy Chain Connection
- RS232
- TTL
- Foot Switch Interface Standard



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- Stall Detection
- Numeric Keypad
- Engineering Unit Selection

Network Multiple Pumps

Network up to 100 Pumps-Mix and Match any Model 200/400 Series Pump!

Advanced Programmable Pumps

Keypad programmable option now available with all Model 200/400 Series syringe pumps.

Lets you program right from the keypad with software program on computer.

A large variety Legacy pumps is available, see table. More detailed information is available on demand.

Infuse Only

	Infuse Only						
Legacy-model	Legacy 100	Legacy 100L	Legacy 100Y	Legacy 101	Legacy 200	Legacy 220	Legacy 250
Mode	Infuse	Infuse	Infuse	Infuse	Infuse	Infuse	Infuse
Number of Syringes	One	Two	Two	Two	Two	10 Maximum	Four
Syring Size	10 µl tot 60 ml	10 µl tot 60 ml	10 µl tot 60 ml	10 µl tot 10 ml	10 µl tot 140 ml	10 µl tot 10 ml (upto 10) 40 ml tot 60 ml (upto 6) 100 tot 140 ml (upto 4)	10 µl to10 ml
User Interface	Keypad	Keypad	Keypad	Keypad	Keypad with numerics		
Display	Backlit LCD						
Accuracy	+/- <1%	+/- <1%	+/- <1%	+/- <1%	+/- <1%	+/- <1%	+/- <1%
Repeatability	+/- 0,1 %	+/- 0,1 %	+/- 0,1 %	+/- 0,1 %	+/- 0,1 %	+/- 0,1 %	+/- 0,1 %
Linear Force	9 kg	9 kg	9 kg	18 kg	18 kg	18 kg	18 kg
Force Adjustment	/	/	/	/	/	/	/
Minimum Flowrate 10µl Syringe	0,1 µl/hr	0,1 µl/hr	0,1 µl/hr	0,001 µl/min	0,001 µl/hr	0,001 µl/hr	0,001 µl/hr
Maximum Flowrate 10 ml Syringe	127 ml/hr	127 ml/hr	127 ml/hr	0,351 ml/min	1270 ml/hr	1270 ml/hr	1270 ml/hr
Maximum Flowrate 60 ml Syringe	423 ml/hr	423 ml/hr	423 ml/hr	/	4235 ml/hr	4235 ml/hr	/
Maximum Flowrate 140 ml Syringe	/	/	/	/	8824 ml/hr	8824 ml/hr	/
Drive Motor	7,5° stepper Motor	7,5° stepper Motor	7,5° stepper Motor	7,5° stepper Motor	1,8° stepper Motor	1,8° stepper Motor	1,8° stepper Motor
Motor Gearbox	25:1	25:1	25:1	150:1	N/A	N/A	N/A



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Microprocesses Motor Drive Control	1/2 microstepping	1/2 microstepping	1/2 microstepping	1/2 microstepping	1/16 microstepping	1/16 microstepping	1/16 microstepping
#microsteps/one revolution of lead screw	2400	2400	240	14400	6400	6400	6400
Advance per microstep	0,529 µm	0,529 µm	0,529 µm	0,088 µm	0,1654 µm	0,1654 µm	0,1654 µm
Minimum Step Rate	30 s/µstep	30 s/µstep	30 s/µstep	30 s/µstep	120 s/µstep	120 s/µstep	120 s/µstep
Maximum Step Rate	0,0025 s/µstep	0,0025 s/µstep	0,0025 s/µstep	0,0025 s/µstep	0,000625 s/µstep	0,000625 s/µstep	0,000625 s/µstep
Pusher Travel Rate							
Minimum	0,10583 µm/min	0,10583 µm/min	0,10583 µm/min	0,001767 µm/min	0,10583 µm/min	0,10583 µm/min	0,10583 µm/min
Maximum	12700 µm/min	12700 µm/min	12700 µm/min	2033 µm/min	126900 µm/min	126900 µm/min	126900 µm/min
Multi-step programming	/	/	/	/	/	/	/
Constante rate	No	No	No	No	Programmable Model		
Pusher Block stall Detection	No	No	No	No	Yes	Yes	Yes
Computer Interface	No	No	No	No	RS-232	RS-232	RS-232
TTL	No	No	No	No	Yes	Yes	Yes
Networking Daisy chain	No	No	No	No	Yes	Yes	Yes
Audible Alarm Indication	/	/	/	/	/	/	/
End of run	Optional	Yes	Optional	Optional	Optional	Optional	Optional
Run LED	No	No	No	No	No	No	No
Power	200-240 VDC 50/60 Hz	200-240 VDC 50/60 Hz	200-240 VDC 50/60 Hz	200-240 VDC 50/60 Hz	200-240 VDC 50/60 Hz	200-240 VDC 50/60 Hz	200-240 VDC 50/60 Hz
Weight	2 kg	2 kg	2 kg	2 kg	4 kg	4 kg	4 kg
Dimensions(cm) HxWxL	23*15,25*13	23*15,25*13	23*15,25*13	23*15,25*13	28*23,5*14	28*23,5*14	28*23,5*14
Certification							
CE,ETL,UL, CSA, CB, Scheme	CE-model	CE-model	CE-model	CE-model	Enkel CE	Enkel CE	Enkel CE
WEEE, EU RoHs	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant	Compliant
Programmable Model	N/A	N/A	N/A	N/A	200P	220P	250P

	Infuse/Withdraw		Push/Pull/Pumps		Continious	High Pressure Pumps	Remote Injector Pump
Legacy-model	Legacy 210	Legacy 230	Legacy 120	Legacy 260	Legacy 270	Legacy 410	Legacy 310plus
Mode	Infuse/Withdraw	Infuse/Withdraw	Push/Pull	Push/Pull	Infuse/withdraw/ Continious	Infuse/Withdraw	Infuse/Withdraw
Number of Syringes	Two	10 Maximum	One and One	Two and Two	Two and Two	One	One



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Syringe Size	10 µl to 140 ml	10 µl to 10 ml (upto10) 40 ml tot 60 ml (upto 6) 100 tot 140 ml (upto 4)	10 µl to 10 ml	10 µl to 60 ml	10 µl to 60 ml	10 µl to 140 ml	0,5 µl to 250 µl
User Interface	Keypad with numerics	Keypad with numerics	Keypad	Keypad with numerics	Keypad with numerics	Keypad with numerics	Keypad
Display	Backlit LCD						
Accuracy	+/- <1%	+/- <1%	+/- <1%	+/- <1%	+/- <1%	+/- <1%	+/- <1%
Repeatability	+/- 0,1 %	+/- 0,1 %	+/- 0,1 %	+/- 0,1 %	+/- 0,1 %	+/- 0,1 %	+/- 0,1 %
Linear Force	18 kg	18 kg	9 kg	18 kg	18 kg	45 kg	0,9 kg
Force Adjustment	/	/	/	/	/	/	/
Minimum Flowrate 10 µl Syringe	0,001 µl/hr	0,001 µl/hr	0,1 µl/hr	0,001 µl/min	0,1 µl/hr	/	145,6 ml/min (100 µl syr)
Maximum Flowrate 10 ml Syringe	1270 ml/hr	1270 ml/hr	127 ml/hr	1270 ml/hr	1270 ml/hr	1270 ml/hr	/
Maximum Flowrate 60 ml Syringe	4235 ml/hr	4235 ml/hr	423 ml/hr	4235 ml/hr	4235 ml/hr	4235 ml/hr	/
Maximum Flowrate 140 ml Syringe	8824 ml/hr	8824 ml/hr	/	8824 ml/hr	8824 ml/hr	8824 ml/hr	/
Drive motor	1,8code2utf('39',0) Stepper Motor	1,8code2utf('39',0) Stepper Motor	7,5code2utf('39',0) Stepper Motor	1,8code2utf('39',0) Stepper Motor	1,8code2utf('39',0) Stepper Motor	1,8code2utf('39',0) Stepper Motor	/
Motor Gearbox	N/A	N/A	25:1	N/A	N/A	N/A	N/A
Microprocessor Motor Drive Control	1/16 micro stepping	1/16 micro stepping	1/2 micro stepping	1/16 micro stepping	1/16 micro stepping	1/16 micro stepping	/
#microsteps/one revolution of lead crew	6400	6400	2400	6400	6400	6400	/
Advance per microstep	0,1654 µm	0,1654 µm	0,529 µm	0,1654 µm	0,1654 µm	0,1654 µm	1,58 µm
Minimum Step Rate	120 s/µstap	120 s/µstap	30 s/µstap	120 s/µstap	120 s/µstap	120 s/µstap	/
Maximale stapsnelheid	0,000625 s/µstep	0,000625 s/µstep	0,0025 s/µstep	0,000625 s/µstep	0,000625 s/µstep	0,000625 s/µstep	/
Puscher Trvel Rate							
Minimum	0,10583 µm/min	0,10583 µm/min	0,10583 µm/min	0,001767 µm/min	0,10583 µm/min	0,10583 µm/min	/
Maximum	12690 µm/min	12690 µm/min	12700 µm/min	126900 µm/min	126900 µm/min	126900 µm/min	/
Multi-step programming	Programmable Model		No	Programmable Model			No
Pusher Block stall Detection	Yes	Yes	No	Yes	Yes	Yes	No
Computer Interface	RS-232	RS-232	Neen	RS-232	RS-232	RS-232	Neen
TTL	Yes	Yes	No	Yes	Yes	Yes	No
Networking Daisy chain	Yes	Yes	No	Yes	Yes	Yes	No
Audible Alarm Indication	/	/	/	/	/	/	/
End of Run	Optional	Optional	Optonal	Optional	Optional	Optional	Optional



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Run LED	No	No	No	No	No	No	No
Power	200-240 VDC 50/60 Hz	200-240 VDC 50/60 Hz	200-240 VDC 50/60 Hz	200-240 VDC 50/60 Hz	200-240 VDC 50/60 Hz	200-240 VDC 50/60 Hz	200-240 VDC 50/60 Hz
Power	4 kg	4 kg	2 kg	4 kg	4 kg	4 kg	4 kg
Dimension(cm) HxWxL	28*23,5*14	28*23,5*14	23*15,25*13	28*23,5*14	28*23,5*14	15*28*24	17,8*4,4*5,1
Certification							
CE,ETL,UL, CSA, CB, Scheme	CE Only	CE Only	CE Model	CE Only	CE Only	CE Only	CE Model



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