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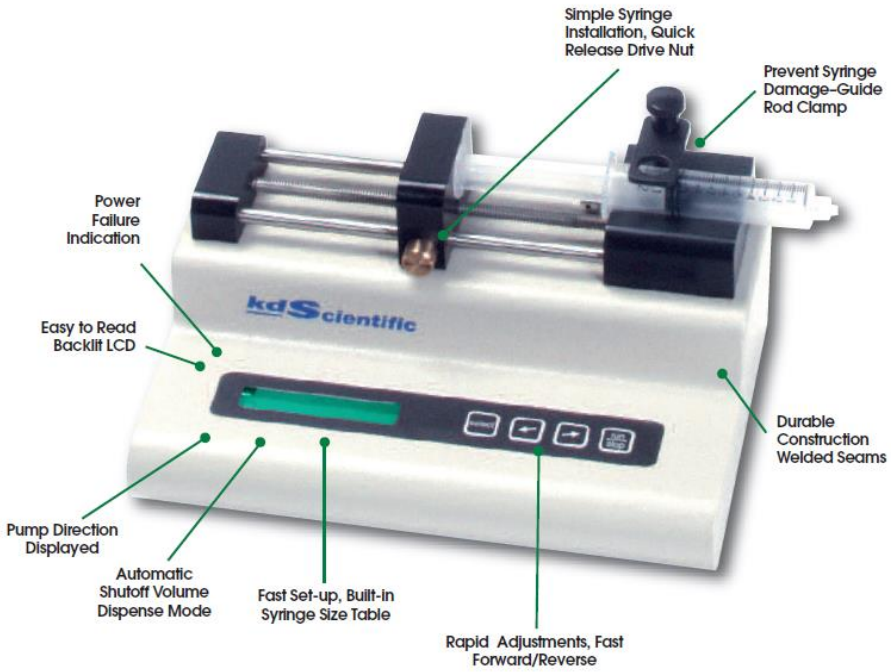
DATASHEET

# The KDS Legacy Series

LEGACY SERIES

The Legacy series is the foundation for all KD Scientific 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 KDS 100/KDS 200 syringe pumps more than any other for the their outstanding reliability and performance. The KDS 100 series pumps give customers the most cost effective solution for infusing fluids. Alternatively, the KDS 200/KDS 400 series give the customer advanced features with RS232 and TTL interfaces. All KDS 200/KDS 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 KDS 200/KDS 400 Pumps

- Daisy Chain Connection
- RS232
- TTL
- Foot Switch Interface Standard
- Stall Detection
- Numeric Keypad
- Engineering Unit Selection

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# Expanded Capabilities

## Network Multiple Pumps

### Network up to 100 Pumps–Mix and Match any KDS 200/400 Series Pump!

All KDS 200/400 series pumps can be networked together. Each pump has a unique address to control its rate and volume remotely from a computer. Pump start/stop activation can be easily controlled. National Instruments certified Labview™ drivers are available at no charge.

## Advanced Programmable Pumps

### Keypad programmable option now available with all KDS 200/KDS 400 Series syringe pumps. Lets you program right from the keypad with software program on computer.

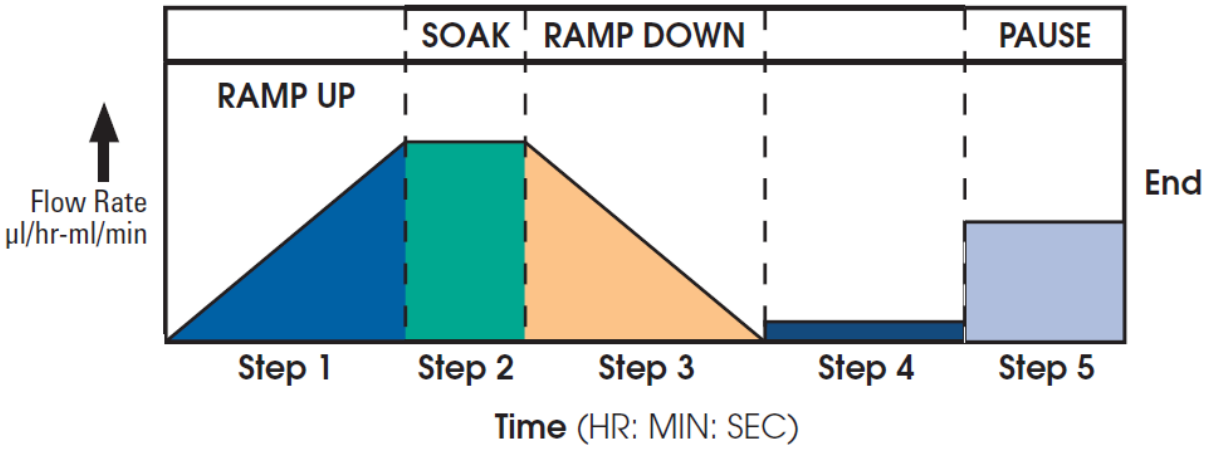
Simply follow a few menu-driven prompts and in just minutes you can customize a program to: control the pump from seconds to days, change flow rates, pause, ramp rates up or down automatically, control outputs and respond to external TTL signals.

Unlike other programmable pumps, there's no need to enter time increments or decrements between start and end flow rates. KDS pumps provide a smooth, linear transition automatically.

A program is divided into eight variable time periods called steps. A step can be up to 12 hours long and may be changed without affecting other steps.

### Each step offers these options:

1. Time duration, from one second up to 12 hours
2. Travel direction – Infuse or withdraw (where available)
3. Beginning flow rate (µl/hr to ml/min range)
4. End flow rate (µl/hr to ml/min range)
5. Pause – Waits for an external trigger to start
6. Status of output TTL pins
7. Loop option – Loops back to any previous step and repeats the intermediate steps. Two separate loops available.
8. Set the count in the loop cycle. Steps may be repeated up to 100 times.
9. Program stored in non volatile memory.



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# Infusion Pumps

KD Scientific infusion pumps are ideal for delivering accurate and precise amounts of fluids for a multitude of applications, including injection of calibrant into a mass spectrometer or reaction chamber, long term drug delivery to animals and general infusion applications.

KDS 100
Single-Syringe
Infusion Pump

KDS 200
Two-Syringe
Infusion Pump

KDS 101
Two-Syringe
Nanoliter Pump

KDS 220
Multi-Syringe
Infusion Pump

KDS 250
Four-Syringe Microliter
Infusion Pump

LEGACY SERIES

## KDS 100

### Single-Syringe Infusion Pump

This economical Single Syringe Infusion Pump combines precision flow with outstanding ease-of-use and exceptional durability.

- Single syringe 10 µl to 60 ml
- Wide flow range up to 423 ml/hr (60 ml syringe)

## KDS 101

### Two-Syringe Nanoliter Pump

The KDS 101 Two-Syringe Nanoliter Pump is ideal for microdialysis and similar applications which require virtually pulseless flow at very low flow rates.

- Holds 2 syringes, 10 µl to 10 ml each
- Minimum flow 0.001 µl/min (10 µl syringe)

## KDS 200

### 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.

- Minimum flow 0.001 µl/hr with 10 µl syringe
- Holds one or two syringes, 10 µl to 140 ml each

## KDS 220

### Multi-Syringe Infusion Pump

KDS 220 Multi-Syringe Infusion Pump is ideal for applications requiring multiple syringes. This pump has been modified to hold up to 10 syringes.

- Multiple syringe holder:
  - *One to ten syringes, 10 µl to 10 ml*
  - *One to six syringes, 20 ml to 60 ml*
  - *One to four syringes, 100 ml to 140 ml*

## KDS 250

### Four-Syringe Microliter Infusion Pump

Each syringe can be sized differently and is clamped independently.

- Multiple syringe holder
  - *Four syringes, 10 µl to 10 ml each*
- Separate clamping accommodates various sizes
- Syringes may be positioned independently for sequential dispensing by the pusher block.

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# Infusion/Withdrawal Pumps

Infuse and withdraw capabilities provide maximum flexibility for varied applications. This feature permits applications, such as automatic withdrawal of samples and unattended filling of syringes at very low flow rates. The unique KDS 310 offers a remote pump head, which is perfect when space is limited. The small size and exceptional low flow rate capability allows direct mounting of the KDS 310 on a stereotaxic manipulator without the need for long narrow tubing which is both difficult to use and requires larger volumes of valuable fluids.

LEGACY SERIES

**KDS 210**
Two-Syringe
Infusion/Withdrawal Pump

**KDS 230**
Multi-Syringe
Infusion/Withdrawal Pump

**KDS 310**
Single Syringe
Nanoliter Pump



Note: Stereotaxic frame for illustration only.

## KDS 230

### Multi-Syringe Infusion/Withdrawal Pump

Ideal for applications requiring multiple syringes, the KDS 230 is an adaptation of the KDS 210. The pump has been modified to hold up to 10 syringes.

- **Multiple syringe holder:**
  - *One to ten syringes, 10 µl to 10 ml*
  - *One to six syringes, 20 ml to 60 ml*
  - *One to four syringes, 100 ml to 140 ml*
- **Multiple mode selection:**
  - *Infusion, Withdrawal, Infusion then withdrawal, Withdrawal then Infusion, Continuous Cycle*

## KDS 210

### Two-Syringe Infusion/Withdrawal Pump

The KDS 210 offers you more advanced features than any other infusion/withdrawal pump in its price range- including five operating modes plus independent rate and volume settings for both infusion and withdrawal.

- **Holds two syringes, 10 µl to 140 ml each**
- **Multiple mode selection:**
  - *Infusion, Withdrawal, Infusion then withdrawal, Withdrawal then Infusion, Continuous Cycle*

## KDS 310 Plus

### Single-Syringe Nanoliter Pump

The KDS 310 Plus Single-Syringe Nanoliter Pump is used exclusively with micro syringes. Small size, remote pump head and a rugged mounting arm make it ideal for use with a micromanipulator, stereotaxic frame and other clamping devices.

- **Mini size pump**
- **Remote pump head**
- **0.5 µl to 250 µl syringe**
- **Minimum flow of 0.001 µl/min (0.5 µl syringe)**

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KD Scientific specialty pumps are engineered to meet the demands of specific applications. These pumps use the basic design of our standard pumps but are modified to provide specific functionality for any application.

# The Legacy Series fits your

KDS 120
Two-Syringe
Push-Pull Pump

KDS 260
Four-Syringe
Push-Pull Pump

KDS 270
Continuous Cycle
Syringe Pump

KDS 410
High Pressure
Syringe Pump

LEGACY SERIES

## KDS 120

### Two-Syringe Nanoliter Push-Pull Pump

This pump provides simultaneous infusion and withdrawal at the same rate with opposing syringes on the same drive screw. The Push/Pull mode is designed for one cycle only.

- Holds two syringes 10 µl to 10 ml each
- Minimum flow 0.1 µl/hr (10 µl syringe)

## KDS 260

### Four-Syringe Push-Pull Pump

This KDS 260 pump provides simultaneous infusion and withdrawal with opposing syringes on a single drive. This is a single cycle pump (due to brackets).

Note: When not used in push/pull mode, the pump has all the features of KDS 210

- Holds up to four syringes, 10 µl to 60 ml each. With large syringes, the full volume may not be usable.

## KDS 270

### Continuous Cycle Syringe Pump

The KDS 270 can hold up to four syringes and can cycle continuously back and forth in a push-pull action. As two syringes are infusing, two syringes are withdrawing at the same rate. At the end of the set volume the direction is automatically reversed and the next cycle begins. With the use of 3-way valves, the pump can empty and refill syringes for a continuous dispense.

- Holds four syringes, 10 µl to 60 ml each. With large syringes the full volume may not be useable. (60 ml syringe - 40 ml useable, 30 ml syringe - full)

## KDS 410

### High Pressure Syringe Pump

The KDS 410 is ideal for delivering fluid to reactors in chemical applications or for working with viscous fluids. The robust design ensures the syringe is kept level during delivery of the fluid. The KDS 410 more than doubles the linear force available in the KDS 200 series.

- Single syringe 10 µl to 140 ml
- Minimum flow 0.001 µl/hr with a 10 µl syringe
- > 100 lbs (45 kg) linear force

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# Everyday Applications

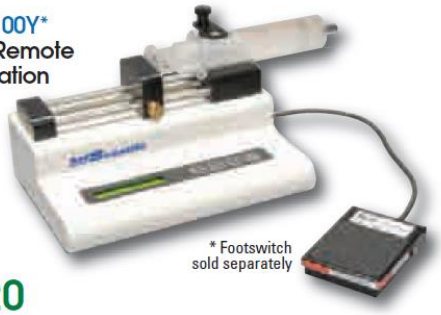
The KDS 100 series has been modified with new hardware and software features for specific applications. Integrating multiple pumps in a system allows the individual pumps to interact with other ones. This will provide a system linked together based on information from one pump being transferred to another.

In addition, new features have been added to the KDS 100 Series including a new remote interface or an LED on the pump to indicate it is running. Contact KD Scientific for more information on other requirements you have for your specific applications.

LEGACY SERIES

KDS 520
Volume Dispense System

KDS 510
Dual Rate
Pump System



KDS 100Y*
With Remote
Operation

* Footswitch sold separately

KDS 100L
With LED
Indication

## KDS 520

### Volume Dispense System

Sequential volume dispensing is easy with the new volume dispensing system. The system includes two KDS 100 pumps and the cable to link the pumps together. Set the same or different volume[s] in pump A and B; pump A will dispense the predetermined volume and start pump B automatically. Pump A and B can have unique flow rates. The two pumps can also be operated as standard independent KDS 100's.

## KDS 510

### Dual Rate Pump System

Activate two KDS 100 pumps simultaneously with one push of the start key. Set each pump with a different flow rate and the pumps will infuse at the same time. The system includes two KDS 100 pumps and the cable to link the pumps together. The two pumps can also be operated as standard independent KDS 100's.

## KDS 100Y

### with Remote Operation

A new version of the rugged KDS 100 can now be remotely triggered with a footswitch or external switch. Starting and stopping dispense or infusion can be automated or remotely activated.

Also Available: 101Y, 120Y, 310Y

## KDS 100L

### with LED Indication

The KDS 100 is now available with an optional LED to indicate the pump is on or running. This feature is ideal to get a quick indication if the pump is dispensing, especially if multiple pumps are in operation.

Also Available: 101L, 120L, 310L

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# Legacy Series Specifications

| | Infuse Only Pumps | | | | | | |
|---|---|---|---|---|---|---|---|
| **Legacy Model** | **KDS 100** | **KDS 100L** | **KDS 100Y** | **KDS 101** | **KDS 200** | **KDS 220** | **KDS 250** |
| **Order Code 110 VAC** | **78-0100** | **78-0100ZZ** | **78-0100Y** | **78-0101** | **78-0200** | **78-0220** | **78-0250** |
| **Order Code 220 VAC** | **78-1100** | **78-1100ZZ** | **78-1100Y** | **78-1101** | **78-1200** | **78-1220** | **78-1250** |
| **Order Code 220 VAC with CE Mark** | **78-9100** | **78-9100ZZ** | **78-9100Y** | **78-9101** | **78-9200** | **78-9220** | **78-9250** |
| **Mode** | Infuse | Infuse | Infuse | Infuse | Infuse | Infuse | Infuse |
| **# Syringes** | One | One | One | Two | Two | 10 Maximum | Four |
| **Syringe Size** | 10 µl to 60 ml | 10 µl to 60 ml | 10 µl to 60 ml | 10 µl to 10 ml | 10 µl to 140 ml | 10 µl to 10 ml (up to 10) | 10 µl to 10 ml |
| | | | | | | 40 ml to 60 ml (up to 6) | |
| | | | | | | 100 ml to 140 ml (up to 4) | |
| **User Interface** | Keypad | Keypad | Keypad | Keypad | Keypad with numerics | Keypad with numerics | Keypad with numerics |
| **Display** | Backlit LCD | Backlit LCD | Backlit LCD | Backlit LCD | Backlit LCD | Backlit LCD | 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** | 20 lb/9 kg | 20 lb/9 kg | 20 lb/9 kg | 40 lb/18 kg | 40 lb/18 kg | 40 lb/18 kg | 40 lb/18 kg |
| **Force Adjustment** | - | - | - | - | - | - | - |
| **Minimum Flow Rate 10 µl 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 Flow Rate 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 Flow Rate 60 ml syringe** | 423 ml/hr | 423 ml/hr | 423 ml/hr | - | 4235 ml/hr | 4235 ml/hr | - |
| **Maximum Flow Rate 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 |
| **Microprocessor 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 | 2400 | 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 sec/µstep | 30 sec/µstep | 30 sec/µstep | 30 sec/µstep | 120 sec/µstep | 120 sec/µstep | 120 sec/µstep |
| **Maximum Step Rate** | 0.0025 sec/µstep | 0.0025 sec/µstep | 0.0025 sec/µstep | 0.0025 sec/µstep | 0.000625 sec/µstep | 0.000625 sec/µstep | 0.000625 sec/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** | No | No | No | No | Programmable Model | Programmable Model | 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 | Yes | No | No | No | No | No |
| **Power Domestic** | 100 ~ 120 VAC 50/60Hz | 100 ~ 120 VAC 50/60Hz | 100 ~ 120 VAC 50/60Hz | 100 ~ 120 VAC 50/60Hz | 100 ~ 120 VAC 50/60Hz | 100 ~ 120 VAC 50/60Hz | 100 ~ 120 VAC 50/60Hz |
| **Power CE and International** | 200 ~ 240 VAC, 50/60Hz | 200 ~ 240 VAC, 50/60Hz | 200 ~ 240 VAC, 50/60Hz | 200 ~ 240 VAC, 50/60Hz | 200 ~ 240 VAC, 50/60Hz | 200 ~ 240 VAC, 50/60Hz | 200 ~ 240 VAC, 50/60Hz |
| **Weight** | 4.5 lb/2 kg | 4.5 lb/2 kg | 4.5 lb/2 kg | 4.5 lb/2 kg | 9.5 lb/4 kg | 9.5 lb/4 kg | 9.5 lb/4 kg |
| **Dimensions (in)** | 9 X 6 x 5 | 9 X 6 x 5 | 9 X 6 x 5 | 9 X 6 x 5 | 11 x 9 x 5.5 | 11 x 9 x 5.5 | 11 x 9 x 5.5 |
| **Dimensions (cm)** | 23 x 15.25 x 13 | 23 x 15.25 x 13 | 23 x 15.25 x 13 | 23 x 15.25 x 13 | 28 x 23.5 x 14 | 28 x 23.5 x 14 | 28 x 23.5 x 14 |
| **Certifications** | | | | | | | |
| **CE, ETL, UL, CSA, CB Scheme** | CE Model | CE Model | CE Model | CE Model | CE Only (no ETL) | CE Only (no ETL) | CE Only (no ETL) |
| **EN 61010, EN 61326** | | | | | | | |
| **WEEE (just WEEE - not RoHS)** | Compliant | Compliant | Compliant | Compliant | Compliant | Compliant | Compliant |
| **Programmable Model** | N/A | N/A | N/A | N/A | **KDS 200P** | **KDS 220P** | **KDS 250P** |
| **Order Code 110 VAC** | | | | | **78-0202** | **78-0222** | **78-0252** |
| **Order Code 220 VAC** | | | | | **78-1202** | **78-1222** | **78-1252** |
| **Order Code 220 VAC with CE Mark** | | | | | **78-9202** | **78-9222** | **78-9252** |

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| Infuse/Withdraw Pumps | | Push/Pull Pumps | | Continuous Pump | High Pressure Pump | Remote Injector Pump |
|---|---|---|---|---|---|---|
| KDS 210 | KDS 230 | KDS 120 | KDS 260 | KDS 270 | KDS 410 | KDS 310 Plus |
| 78-0210 | 78-0230 | 78-0120 | 78-0260 | 78-0270 | 78-0410 | 78-0311 |
| 78-1210 | 78-1230 | 78-1120 | 78-1260 | 78-1270 | 78-1410 | 78-1311 |
| 78-9210 | 78-9230 | 78-9120 | 78-9260 | 78-9270 | 78-9410 | 78-9311 |
| Infuse/Withdraw | Infuse/Withdraw | Push/Pull | Push/Pull | Infuse/Withdraw/Continuous | Infuse/Withdraw | Infuse/Withdraw |
| Two | 10 Maximum | One and One | Two and Two | Two and Two (Four total) | One | One |
| 10 µl to 140 ml | 10 µl to 10 ml (up to 10) | 10 µl 10 ml | 10 µl to 60 ml | 10 µl to 60 ml (up to 4) | 10 µl to 140 ml | 0.5 µl to 250 µl |
| | 40 ml to 60 ml (up to 6) | | | | | |
| | 100 ml to 140 ml (up to 4) | | | | | |
| Keypad with numerics | Keypad with numerics | Keypad | Keypad with numerics | Keypad with numerics | Keypad with numerics | Keypad |
| Backlit LCD | Backlit LCD | Backlit LCD | Backlit LCD | Backlit LCD | Backlit LCD | Backlit LCD |
| +/-<1% | +/-<1% | +/-<1% | +/-<1% | +/-<1% | +/-<1% | +/-<1% |
| +/-0.1% | +/-0.1% | +/-0.1% | +/-0.1% | +/-0.1% | +/-0.1% | +/-0.1% |
| 40 lb/18 kg | 40 lb/18 kg | 20 lb/9 kg | 40 lb/18 kg | 40 lb/18 kg | >100 lb/45 kg | 2 lb/ 0.9kg |
| - | - | - | - | - | | |
| 0.001 µl/hr | 0.001 µl/hr | 0.1 µl/hr | 0.001 µl/hr | 0.001 µl/hr | | 145.6 µl/min (100 µl syr) |
| 1270 ml/hr | 1270 ml/hr | 127 ml/hr | 1270 ml/hr | 1270 ml/hr | 1270 ml/hr | - |
| 4235 ml/hr | 4235 ml/hr | 423 ml/hr | 4235 ml/hr | 4235 ml/hr | 4235 ml/hr | - |
| 8824 ml/hr | 8824 ml/hr | - | 8824 ml/hr | 8824 ml/hr | 8824 ml/hr | - |
| 1.8' Stepper Motor | 1.8' Stepper Motor | 7.5' Stepper Motor | 1.8' Stepper Motor | 1.8' Stepper Motor | 1.8' Stepper Motor | - |
| n/a | n/a | 25:1 | N/A | N/A | N/A | N/A |
| 1/16 microstepping | 1/16 microstepping | 1/2 microstepping | 1/16 microstepping | 1/16 microstepping | 1/16 microstepping | |
| 6400 | 6400 | 2400 | 6400 | 6400 | 6400 | - |
| 0.1654 µm | 0.1654 µm | 0.529 µm | 0.1654 µm | 0.1654 µm | 0.1654 µm | 1.58 µm |
| 120 sec/µstep | 120 sec/µstep | 30 sec/µstep | 120 sec/µstep | 120 sec/µstep | 120 sec/µstep | - |
| 0.000625 sec/µstep | 0.000625 sec/µstep | 0.0025 sec/µstep | 0.000625 sec/µstep | 0.000625 sec/µstep | 0.000625 sec/µstep | - |
| | | | | | | - |
| 0.10583 µm/min | 0.10583 µm/min | 0.10583 µm/min | 0.10583 µm/min | 0.10583 µm/min | 0.10583 µm/min | - |
| 126900 µm/min | 126900 µm/min | 12700 µm/min | 126900 µm/min | 126900 µm/min | 126900 µm/min | - |
| Programmable Model | Programmable Model | No | Programmable Model | Programmable Model | Programmable Model | No |
| Yes | Yes | No | Yes | Yes | Yes | No |
| RS-232 | RS-232 | No | RS-232 | RS-232 | RS-232 | No |
| Yes | Yes | No | Yes | Yes | Yes | No |
| Yes | Yes | No | Yes | Yes | Yes | No |
| | | | | | | |
| Optional | Optional | Optional | Optional | Optional | Optional | Optional |
| No | No | No | No | No | No | |
| 100 ~ 120 VAC 50/60Hz | 100 ~ 120 VAC 50/60Hz | 100 ~ 120 VAC 50/60Hz | 100 ~ 120 VAC 50/60Hz | 100 ~ 120 VAC 50/60Hz | 100 ~ 120 VAC 50/60Hz | 100 ~ 120 VAC 50/60Hz |
| 200 ~ 240 VAC, 50/60Hz | 200 ~ 240 VAC, 50/60Hz | 200 ~ 240 VAC, 50/60Hz | 200 ~ 240 VAC, 50/60Hz | 200 ~ 240 VAC, 50/60Hz | 200 ~ 240 VAC, 50/60Hz | 200 ~ 240 VAC, 50/60Hz |
| 9.5 lb/4 kg | 9.5 lb/4 kg | 4.5 lb/2 kg | 9.5 lb/4 kg | 9.5 lb/4 kg | 14.1 lb/6.4 kg | 4.5 lb/2 kg |
| 11 x 9 x 5.5 | 11 x 9 x 5.5 | 9 X 6 x 5 | 11 x 9 x 5.5 | 11 x 9 x 5.5 | 6 x 11 x 9.5 | 7 X 1.7 x 2 |
| 28 x 23.5 x 14 | 28 x 23.5 x 14 | 23 x 15.25 x 13 | 28 x 23.5 x 14 | 28 x 23.5 x 14 | 15 x 28 x 24 | 17.8 x 4.4 x 5.1 |
| | | | | | | |
| CE Only (no ETL) | CE Only (no ETL) | CE Model | CE Only (no ETL) | CE Only (no ETL) | CE Only (no ETL) | CE Model |
| | | | | | | |
| Compliant | Compliant | Compliant | Compliant | Compliant | Compliant | Compliant |
| KDS 210P | KDS 230P | N/A | KDS 260P | KDS 270P | KDS 410 P | |
| 78-0212 | 78-0232 | | 78-0262 | 78-0272 | 78-0412 | |
| 78-1212 | 78-1232 | | 78-1262 | 78-1272 | 78-1412 | |
| 78-9212 | 78-9232 | | 78-9262 | 78-9272 | 78-9412 | |