

Sierra Ordering Information

Model	Pump Types/ Solenoid Included				Code No.
	Liquid Detergent	Detergent Solenoid	Liquid Rinse	Liquid Sanitizer	
Three Product	✓		✓	✓	1201193
Three Product		✓ (Brass)	✓	✓	1201189
Three Product		✓ (Plastic)	✓	✓	1201191
Two Product		✓ (Brass)	✓		1201183
Two Product		✓ (Plastic)	✓		1201185
Two Product	✓		✓		1201187
Two Product (no probe)	✓		✓		1202986

SIERRA TABLE

NOTE: Mounting bracket included.

Install Kit #1 (Select one of the following)

- **Complete Kit** - with or without Probe (Temperature Compensating Probe available). This includes 15' of 1/4" red polyflow tubing, 35' of 1/4" white polyflow tubing, 25' of 1/8" polyflow tubing, 3 ea snap-on tube guides, 1 ea concentration probe (in probe configuration only), 1 ea bulkhead fitting, 15' of 7 conductor, 20 gauge hookup wire, assorted tubing clamps, mounting hardware.
- **Basic Kit** - with or without Probe. This includes 1 ea concentration probe, probe wire, and 1 ea bulkhead fitting only.
- **No Kit**

Install Kit #2 (Select one of the following)

- **Complete Kit** - with or without Probe (Temperature Compensating Probe available). This includes 10' of 1/4" polyflow tubing, 15' of 1/4" red polyflow tubing, 25' of 1/8" polyflow tubing, 2 ea snap-on tube guides, 1 ea concentration probe (in probe configuration only), 1 ea saddle clamp, 1 ea shut-off valve, 1 ea bulkhead fitting, 15' of 7 conductor, 20 gauge hookup wire, assorted tubing clamps, mounting hardware.
- **Basic Kit** - with or without Probe. This includes 1 ea concentration probe, probe wire, and 1 ea bulkhead fitting only.
- **No Kit**

Install Kit #3 (Select one of the following)

- **Complete Kit** - with or without Probe (Temperature Compensating Probe available). This includes 25' of 1/8" polyflow tubing, 1 ea snap-on tube guide, 1 ea concentration probe (in probe configuration only), 1 ea saddle clamp, 1 ea shut-off valve, 15' of 7 conductor, 20 gauge hookup wire, assorted tubing clamps, mounting hardware.
- **Basic Kit** - with or without Probe. This includes 1 ea concentration probe, probe wire, and 1 ea bulkhead fitting only.
- **No Kit**

Install Kit #4 (Select one of the following)

- **Complete Kit** - with or without Probe (Temperature Compensating Probe available). This includes 25' of 1/4" polyflow tubing, 25' of 1/8" polyflow, 2 ea snap-on tube guides, 1 ea concentration probe (in probe configuration only), 1 ea saddle clamp, 1 ea shut-off valve, 15' of 7 conductor, 20 gauge hookup wire, assorted tubing clamps, mounting hardware.
- **Basic Kit** - with or without Probe. This includes 1 ea concentration probe, probe wire, and 1 ea bulkhead fitting only.
- **No Kit**

Rinse Injector (Call for injector options)

Nylon and Stainless Steel rinse injectors available.

Accessories

Item N°	Description
068521	Sierra Sanitizer Pump Add-on Accessory Kit
069496	Sierra Auxiliary Harness I/O Accessory Kit
069488	Main PCB Assembly with VCP
087751	Power Supply, 100-240 VAC
051351	Motor/gearbox
069188	Mounting Bracket

Specifications subject to change without notice

Sierra

At the Peak of Warewashing



Sierra drives machine warewashing profitability

Sierra is a multi-product chemical dispensing system for use in machine warewash applications. The advanced features include rack counting, pump and dishmachine runtime, audible alarms, multiple languages and water resistance. Sierra's patented Virtual Clean Probe™ (VCP) guarantees fewer service calls, better performance and eliminates wasted chemical due to incorrect conductivity readings.

Sierra comes complete with an installation kit, rinse injector and mounting bracket. A universal power supply automatically switches to operate from 100-240 VAC and protects Sierra from damaging power fluctuations.

Installation requires less than 1 hour using an easily-accessible terminal strip, and Sierra is quickly programmed with intuitive text menus. Sierra is easily installed for use with or without a probe in any door or conveyor warewash system.

Pays for Itself



- Easy setup using text-based programming menus
- Increased hygiene control - includes alarms for Dirty Washwater, Low Product, Out of Product
- Reduces detergent overuse and probe maintenance with VCP
- Manages profitability and efficiency with datalogging of rack count, pump and dishwasher runtime
- Simplified maintenance with patented SnapHead™ pump



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Beta Technology is ISO9001 Certified



Dwg# 14162-00, Rev D

Easy to program. Easy to calibrate. Fewer trouble calls. Less training and maintenance. Pays for itself.

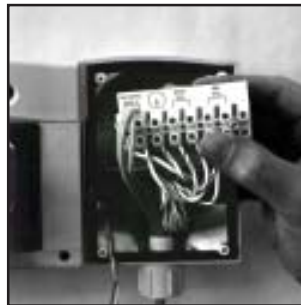


Beta SnapHead™ Pump

You wish your VCR was this easy...

Sierra is flexible, modular and easy to install for use with any door or conveyer dishmachine. Sierra has a simple menu system and SmartScreens™ that speed your installation by only displaying the information applicable to your setup. Kitchen personnel can always access useful information while a passcode protects the dispenser settings. For delimiting, Sierra can be disabled at the touch of a button to prevent detergent waste.

A probe can also be installed at any time by simply connecting the conductivity and/or temperature wires to the internal terminal strip. For maximum flexibility Sierra accepts AC and DC voltage wash and rinse signals. A contact closure pressure switch can also be used to signal the rinse cycle. An optional accessory kit allows use of an external alarm and a low product contact closure switch. Sierra uses the patented Snap-Head™ pump to provide reliability and make maintenance simple.



Snap-out terminal block eases wiring connections.

Premium Performance...

Getting superior results means ensuring chemical is properly dispensed. Sierra ensures premium performance with visual and audible alarms. The sonic alarm alerts the operator there is a problem, while the display gives troubleshooting information. For example, the low detergent alarm tells the operator there is not enough chemical in the wash tank. The most common cause of this alarm is an out-of-detergent condition, so the display commands the operator to "Add Detergent".



VCP enables dirty probes to perform as if clean.

Dirty wash water, calcium and food soil can foul the probe and reduce the effectiveness of chemicals. To maximize chemical performance Sierra counts racks and can be programmed to alert the operator to "Drain Tank" after a set number of racks. Sierra uses a patented pulse technology that reduces scaling, while our VCP software eliminates conductivity reading errors due to fouling. If you ever have to clean probes, our patented VCP™ software is for you. The combination of Sierra and VCP™ delivers optimal results while minimizing chemical costs, maintenance and service calls.



Not only can you count on Sierra, it will count for you...

Sierra logs account management information that can be used to analyze performance and costs. On-board datalogging of Total Racks, Racks Since Last Drain, Total Drains, Detergent Run Hours, and Wash On Hours is standard with Sierra. The data can then be used to calculate account information like chemical cost per rack and location efficiency.



A water solenoid and third pump for sanitizer are available on order, and can also be field installed.

Sierra Specifications

Dimensions

Three-Product Enclosure

Height: 5.75 in/14.60 cm
Width: 15.25 in/40.96 cm
Depth: 5.5 in/13.97 cm

Two-Product Enclosure

Height: 5.75 in/14.60 cm
Width: 11.50 in/31.12 cm
Depth: 5.5 in/13.97 cm

Weight

4.38 lbs (2 kg) maximum

Cabinet Material

ABS – Flame Retardant
IP54 Water-Resistant

Mounting

Wall mounted with stainless steel bracket

Ambient Operating Temperature

36 to 120° Fahrenheit
(2 to 49° Celsius)

Electrical Power Configurations

100-240VAC, 50-60 Hz, 0.3 Amp (max)

Pumps

Peristaltic, dual roller, self-priming and self-checking.

Pump Tubing Material (standard)

Detergent: Norprene
Rinse: BiWall

Sanitizer: Norprene

Pump Flow Rates

Pump 1: Detergent 3/16" ID tube, adjustable 5% to 100%, 0.24-4.8 oz (7-140 ml) per minute

Pump 2: Rinse 1/16" ID tube, adjustable 5% to 100%, 0.025-0.5 oz (0.75-15 ml) per minute

Pump 3: Sanitizer 1/8" ID tube, adjustable 5% to 100%, 0.01-2 oz (3-60 ml) per minute

Triggers

Wash and Rinse Voltage Range

24 VAC to 240 VAC
30 VDC to 100 VDC

Signal Connections

Wash signal is typically connected across either the motor contactor coil or the fill solenoid valve.

Rinse signal is typically connected across the rinse solenoid valve.

Hydraulic Performance

Pump 1: Detergent

Maximum Vacuum 8 in (200 mm) of mercury
Maximum Pressure 1.4 bar (20 psi)

Pumps 2 and 3, Rinse and Sanitizer

Maximum Vacuum 8 in (200 mm) of mercury
Maximum Pressure 2.1 bar (30 psi)

Solenoid

10 watts, 24 VDC

Alarms

An adjustable, audible alarm. Set alarm with potentiometer under sliding door of controller. Emits 80db at 4 feet max.(1.22 meters). If required, you may connect a 24VDC, 500mA external alarm.

Low Level Alarm

Display reads "CHECK PRODUCTS"

Overfeed Stop Alarm (probe operation only)

Display reads "DET FEED FAILURE"

Detergent Alarm Timeout

Display reads "ADD DETERGNT"

Dirty wash water Dump Alarm

Display reads "DRAIN TANK"

Approvals

CSA, CE approved



Rack Counter

Sierra records the number of racks since the last drain, and the number since installation, up to 99,999,999. Because Sierra's counter goes up so high, it is excellent for per-rack, activity-based billing, whereas a lower-counting dispenser (such as one that only goes up to 9990) would max out too quickly.

Drain Counter

Sierra counts the total drains. This allows the customer to determine whether the tank is drained often enough.



Pump Run Hours

Sierra records the total number of hours the detergent and rinse pumps have run. This lets you calculate how much chemical is being used.



Wash On Hours

Sierra records the hours the wash trigger (or rinse/pressure switch in probeless mode) has been on. With this information you can assess the efficiency of your operation.

