



Kleen Flo Wash System



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The Kleen Flo Wash Controller has an easy-to-navigate layout with touch-screen display which reduces confusion for the operator. The pre-programmed defaults save time, and changes are simple to make to effectively and efficiently clean your milking system.

<u>KLEEN FLO WASH SYSTEMS</u>		<u>Dealer Cost</u>	<u>Discounted Cost</u>
40100NP	Kleen Flo Pipeline Wash Control Panel 120V AC WITH 3-Unit 30oz. PPU, Pressure Switch, Temperature Sensor and 2 x 3/4" Water Valves	2442.10	2197.89
40103NP	Kleen Flo Pipeline Wash Control Panel 120V AC WITH Pressure Switch and Temperature Sensor	1,850.00	1,665.00
40105NP	Kleen Flo Pipeline Wash Control Panel Only 120V AC 15amp 15 Fused Outputs, Touch Screen HMI/PLC Modular Control System	1,598.00	1,438.20



Kleen Flo Pipeline Wash System Features

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3 Formulas – Up to 7 Cycle Wash Programs For Each

1. Pre-Rinse
2. Wash 1
3. Wash 2
4. Rinse 2
5. Acid
6. Rinse 3
7. Sanitize



Easy Programming

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Temperature Controlled Fill, Monitoring Temps for both Milk & Wash

Wash: Actual cycle solution temperatures are displayed on the front of the **Kleen Flo Wash Controller**. It gives a low temp warning if temperature drops below settable threshold during the fill. It also monitors the temperature during main Wash circulation and will sound alarm and divert to the drain when temperature drops below your selected temperature range.

Milk: System monitors the milk temperature on plate cooler during milking to show proper cooling is taking place using a selectable Alarm Temp Setting for milk that is too warm.

Alarm Feature: Up to 12 different Alarm Codes are displayed and recorded to Alarm History with up to 100 stored in history with time and date stamped. Also, system can trip an external alarm to be seen or heard near the operator.

Add more Water Feature: Ability to add extra water after start of circulation on all cycles. This accommodates systems with small wash vats that need extra water.

Programmable Pre-Sanitizer Start Times: Automatically sanitizes your milking system at the times you want so your milking system will be ready to milk at milking time.

Divert Rinse Water: Divert initial rinse water at programmable time. Does not re-circulate dirty rinse water. Diverted first rinse preheats the pipeline for more effective cleaning in detergent cycle.



Automatic Chemical Dispensing: No chemical handling reduces risk of damage to skin or clothing from caustic chemicals. Precisely operates peristaltic pumps without additional pump timer controls. Pumps are set in 1-second increments. Three pumps are included in one package at 30oz per minute. Three-pump peristaltic pump units are also available for 50 oz per minute.

Supports 2-Part Wash Chemicals: The 2-Part Wash Chemicals can be custom blended on the farm in the wash vat. Lower cost detergents can have stronger, more effective components and the separate chlorine can be kept fresh and used at the level that is right for the dairy.

Automatic Wash Cycling or Manual Wash Selection: Can be programmed to cycle on one wash formula for the amount of washes you prefer, then switch to any of the other two formulas where you can run them for the amount of time you indicate. User can manually select one of three wash formulas, then have it revert back on the next wash to cycle between different formulas you have established.

Skip a Cycle: The Skip Feature allows operator to advance to the next cycle if time is an issue. It is also a great feature for troubleshooting and checking the system operation.

Programmable Hot Acid Rinse: Choose how often to run based on your water quality. Hot acid rinse will help reduce buildup of milk stone and hard water minerals.

Low Chemical Alarm Feature: With the Optional Chemical Probe, user can monitor up to four chemical drums to make sure you don't run out of chemicals.

Wash Control Specifications

The Controller System has the latest PLC touch-screen technology with a 4.3" screen that is easy to see and navigate the functions.

- ◆ There are 10 Inputs and 15 Outputs to control many Devices.
- ◆ All Outputs are relay isolated from the PLC and are independently fuse protected.
- ◆ The 120 VAC Input is surge protected with insurance.
- ◆ A Support and Test Package is available which will make testing and demonstrating the unit as easy as plugging into a 120 VAC outlet.
- ◆ There is a Test Function Feature to make sure all your Inputs and Outputs are functioning properly.
- ◆ The entire main component system has LEDs to indicate what functions are in operation.
- ◆ The entire component package has easy to remove quick releases to make replacement of components a snap.
- ◆ The Controller System can easily be modified to work with your Output Devices at 12 V, 24 V, 220 V.
- ◆ Four Screen Display Levels with a total of 43 screens.
- ◆ You can build up to 4 Formulas and there are 7 different Cycles, 93 Timers and 21 Settings for each formula.
- ◆ Four Formulas = 456 Timer Settings and another 32 Main System Settings for a total of 488 settings for unsurpassed adjustability.
- ◆ Pre-programmed defaults for Formula 1 and a pre-loaded default formula to save you time setting up additional formulas.

WATER VALVES

- 40114NP** 3/4" NPT Dema 120V AC Valve, 38.73 Gal/Min
- 21030** 1" NPT EZ Solenoid Valve 120V AC
- 21027** 1-1/2" NPT Solenoid Valve 120V AC
- 20990** 120V AC Coil for Blue Water Valve
- 22029** Blue Water Valve 120V AC Dual Coils
- 22031** Single Water Valve 120V AC



CHEMICAL PROBES

Custom-length probes can be ordered if more than 39" length is needed.

- 40116NP** Low Chemical Alarm Probe with Chemical Pickup Tube for up to 39" Tanks (Std 275 Gal)
- 40119NP** Chemical Probe with Rubber Probe Holder
- 40120NP** Chemical Refill Probe
- 40157NP** 1/4" PVC Schedule 80 Chemical Resistant Pipe .50" OD
- 40155NP** 1/4" Socket Coupling PVC Schedule 80 Pipe



40116NP 40119NP

CHEMICAL DISPENSERS

- 40115NP** Kleen Flo Wash 30 oz Min. P.P.U. Dispenser 120V AC 3 Unit Dairy Pro **WITHOUT** Timer CB
- 79360** Kleen Flo Wash 50 oz Min. P.P.U. Dispenser 120V AC 3 Unit Dema **WITHOUT** Timer CB
- 40118NP** Bender 3-Jar Chemical Dispenser f/Powder or Liquid Chemicals with Water Valves



40115NP



79360



40118NP

TEMPERATURE SENSORS

- 40109NP** WASH Temperature Sensor Assy
- 40106NP** MILK Temperature Sensor Assy



TESTING & SERVICE KIT

- 40117NP** Kleen Flo Wash Control Test & Support Package - Includes Flash Drive with Software & Manuals for support/updates, Tools to test/operate inputs for function testing, and Computer Cable for HMI. **ONE KIT for EACH Service Person in the field is recommended.**

WATER FILL LEVEL SWITCHES

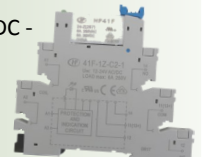
- 40107NP** Pressure Switch Assy - Use with Peristaltic Pump Unit
- 40108NP** Pressure Switch Assy - Use w/Bender Jar Unit
- R35525NP** Bulk Tank Alarm Probe Assy 16" Long

EXTERNAL ALARMS

- R35505NP** Deluxe Alarm, Amber Strobe & Audible 24V DC, 120-240V AC
- R35506NP** Deluxe Alarm, Red Strobe & Audible 24V DC, 120-240V AC

CONTROLLER PARTS

- 40112NP** 4.3" Touch Screen Display - HMI
- 40110NP** CPU - PLC
- 40111NP** 8 Output Module
- 40113NP** Display Com Cable
- P29751NP** Control Relay Complete 24V AC/DC - Consists of:
 - P19801NP** - Relay Only
 - P19803NP** - Holder for Relay
- 40137NP** Cartridge Fuse 250V 5A 5x20mm Fast Acting



**DISCOUNTS ON COMPLETE KLEEN FLO WASH SYSTEMS
VALID THROUGH MARCH 31, 2019
MUST MENTION CODE "DISCOUNT-10" WHEN ORDERING**

