

# MULTI-FLOW

## **Laundry Chemical Dispenser**

The Multi-Flow is a versatile Laundry Chemical Dispenser that incorporates simplicity in programming and rugged reliability with advanced features you would expect only from Knight. Multi-Flow is a microprocessor based dispenser that feeds up to 8 chemical products to Commercial and On-Premise Laundry machines with proven reliability and accuracy. The Multi-Flow system comes with the easy-to-use remote control, peristaltic pumps (available with multiple flow rates), and optional high or low flow Flush Manifold.



- For washers with up to 450 lb. wash load capacity
- Up to 8 chemical capability
- Peristaltic pumps flow rates: 10, 20, 40, 155, 226 oz./min.
- 16 formula capability
- Programming: automatic formula select, drain mode, signal mode, relay mode
- Optional flush manifold
- MicroProcessor based controls









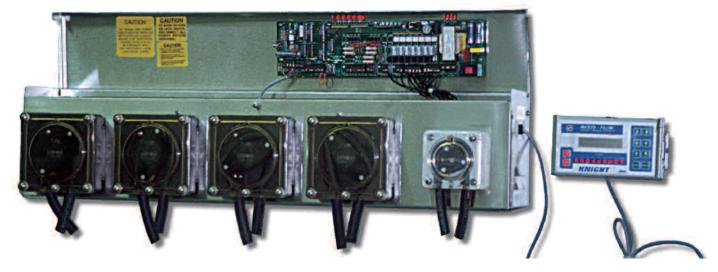
## Multi-Flow

**Applications:** Healthcare Laundry, Hospitality Laundry, Commercial Laundry, Shirt Laundry, Food Plant Sanitation (CIP). Compatible with Tunnel Washers, Washer Sterilizers, Bakery Pan Washers, and Conventional Washers up to 450 lbs.

#### **Key Features**

- 16 Formula Capability
- Adjustable Automatic Formula Select
- Quick Disconnect Cable Connection
- Programmable Delay

- Flush Mode Function
- Bleach Defeat
- Remote Pump Calibration
- Multiple Chemical Levels
- Load Counter
- Relay Mode
- Private Access Code
- Programmable System Lockout



## Multi-Flow Remote Control - It's Simple, Compact and Cost Effective!

The installer and the operator will find the versatile Multi-Flow remote control easy to use. This remote control allows the installer to preset wash formulas, set auto formula selection (AFS), load count, delay time, relay mode, drain mode, private access code, and more.

## For the Installer

Programming of the system can easily be made from the front of the washer, washer supply compartment, or at the dispenser with this portable hand-held remote control system. The 16 formula capability provides greater control of chemical costs and wash results for commercial laundry soil classifications. User friendly menu driven dispenser programming saves time on installation.

## For the Operator

The user friendly Multi-Flow remote control mounts to the front of the washer, where operators need it. Formula select buttons enable operators to choose from 1 to 16 formulas shown on the LCD display. A private access code is required to program or change the settings of the dispenser. Users have secondary access codes for resetting load counts and priming pumps.

## Multi-Flow Remote Control





## Multi-Flow Remote Control - Rapid Dispenser Programming, A Time Saver!

Set-up programs can be copied from one dispenser to another to save time on installation. Data transfers from one dispenser to another over the standard plug-in network cable.



## Peristaltic Pumps with Multiple Flow Rates - Accurate and Reliable

Each Multi-Flow system can house up to six pumps. You can select any combination of pump rates to meet your requirement.



## **Peristaltic Pump Features:**

- Completely Self Priming
- Positive Displacement
- Accurate and Consistent Flow
- Long Life Squeeze Tubing
- Minimum Maintenance

### Feed Rate:

10 oz/min (296 mL/min) KP-5100X
 23 oz/min (681 mL/min) KP-8120AX
 40 oz/min (1148 mL/min) KP-8120BX
 155 oz/min (4588 mL/min) KP-9130XP
 226 oz/min (6600 mL/min) KP-9270XP

## Knight Flush Manifolds - Increased Protection Against Corrosion!

The High/Low Flow Knight Flush Manifold offers an increased level of safety for operators as well as protection against corrosion to the washer and chemical burn to the fabrics.

When the highly corrosive laundry chemicals are dispensed by the peristaltic pumps into the Flush Manifold, the unique flush mode of the control opens the built-in water solenoid to provide a diluted flush to the washer through a single injection line. Concentration chemicals can now be dispensed with less chemical shock to the fabrics being washed. The external high flow check valves prevent back-siphonage as well as cross contamination of chemicals.

#### Flush Manifold Features:

- New robust "ball" check valve with optional Viton or EPDM O-ring
- Water inlet solenoid
- Optional proof of flow switch
- Pressure regulator
- Water inlet back check valve
- Injection molded eight port manifold with high flow check valves
- Nylobraid tubing and barb fittings

**Note:** Most laundry machine manufacturers now require diluted chemical injection for warranty purposes. Proof of flow switch recommended for consistent product dilution and injection.



High Flow Flush Manifold with 1/2" Water Solenoid Valve



Low Flow Flush Manifold with 1/4" Water Solenoid Valve

## ORDERING INFORMATION

## **Multi-Flow Laundry Chemical Dispensers**

#### WITHOUT PUMPS

Features Include: Stainless steel case and cover, 16-formula remote control w/ 25 ft.(8m) cable, signal input/pump output circuitry, volume/time pump calibration, L.C.D. formula display, flush mode, drain mode, multiple chemical levels, signal lockout, supply signal indicators, load counter, variable auto-formula select, external pump prime, auto-program function, personalized access code, choice of pumps.

How to order: Select the case size for the number of pumps required. Order any combination of 500/800/900 series pumps based on the required flow rate for each product. Signal cable, pickup tubes and poly tubing must also be specified to meet installation requirements.

Model	Part Number	Description		
MF-4803RC	7677803	3 Pump Dispenser w/Remote Control, w/o pumps, (500/800)		
MF-4804RC	7677804	4 Pump Dispenser w/Remote Control, w/o pumps, (500/800)		
MF-4805RC	7677805	5 Pump Dispenser w/Remote Control, w/o pumps, (500/800)		
MF-4806RC	7677806	6 Pump Dispenser w/Remote Control, w/o pumps, (500/800)		
MF-4808RC *	7677808	8 Pump Dispenser w/Remote Control, w/o pumps, (500/800)		
MF-4904RC	7677904	4 Pump Dispenser w/Remote Control, w/o pumps, (500/800/900)		
MF-4905RC	7677905	5 Pump Dispenser w/Remote Control, w/o pumps, (500/800/900)		
MF-4906RC	7677906	6 Pump Dispenser w/Remote Control, w/o pumps, (500/800/900)		
MF-4908RC *	7677908	8 Pump Dispenser w/Remote Control, w/o pumps, (500/800/900)		
MFRC	0300060-02	Remote Extension Cable 100 ft.		
<ul> <li>* Indicates sys</li> </ul>	* Indicates system includes 8 pump Input/Output Board in 6 pump cabinet.			

## **Multi-Flow Add-on Pumps**

Model	Part Number	Description
MF-4801	7677810	1 Pump Slave Case, w/o pump, (500/800)
MF-4901	7677910	1 Pump Slave Case, w/o pump, (500/800/900)

## **Multi-Flow Pump Options**

Model	Part Number	Description
	Part Number	Description
KP-5100X	7108262	500 Series Pump, 100 RPM (7.7 oz/min) (227 ml/min)
KP-5100XP	8600120	500 Series Pump,100 RPM (7.7 oz/min) (227 ml/min) w/Quick Change Panel - 900 Case
KP-8120AX	8507752	800 Series Pump, 120 RPM (23 oz/min) (681 ml/min)
KP-8120AXP	8600110	800 Series Pump, 120 RPM, (23 oz/min.) (681 ml/min.) w/Quick Change Panel - 900 Case
KP-8120BX	8507754	800 Series Pump, 120 RPM, (40 oz/min.) (1,184 ml/min.)
KP-8120BXP	8600115	800 Series Pump, 120 RPM, (40 oz/min.) (1,184 ml/min.) w/Quick Change Panel - 900 Case
KP-9130XP	8600116	900 Series Pump, 130 RPM, (155 oz/min.) (4588 ml/min.) w/Quick Change Panel - 900 Case
KP-9270XP	8600126	900 Series Pump, 270 RPM, (226 oz/min.) (6690 ml/min.) w/Quick Change Panel - 900 Case
Note:	1. Add (-01) to	Part Number for 115 VAC 60 Hz.
	2. Add (-02) to	Part Number for 230 VAC 60 Hz.
	3. For 230 Volt !	50 Hz, 800/500 Series, add (-03) to Part Number
	4. For 230 Volt	50 Hz 900 Series, add (-03) to Part Number

## **Multi-Flow Electronics Upgrade Kit**

Model	Part Number	Description
MF-4	7676004	4 Pump Multi-Flow Electronics Upgrade Kit w/Remote Controland 4 Pump Input/Output Board and Mounting Shield
MF-6	7676006	6 Pump Multi-Flow Electronics Upgrade Kit w/Remote Control and 6 Pump Input/Output Board and Mounting Shield
MF-8	7676008	8 Pump Multi-Flow Electronics Upgrade Kit w/Remote Control and 8 Pump Input/Output Board and Mounting Shield
Note:	1. Add (-01) to	Part Number for 115 VAC 60 Hz.
	2. Add (-02) to	Part Number for 230 VAC 60 Hz.
	3. For 230 Volt	50 Hz, 800/500 Series, add (-03) to Part Number
	4. For 230 Volt	50 Hz 900 Series, add (-03) to Part Number

## Flush Manifolds

Model	Part Number	Description
	7002940-01	8 Port High Flow Flush Manifold without Check Valves, 1/2" Asco Solenoid Valve (115 VAC), 1/2" Brass Watts Pressure Regulator
		and Connector Kit
	7002940-02	8 Port High Flow Flush Manifold without Check Valves, 1/2" Asco Solenoid Valve (230 VAC), 1/2" Brass Watts Pressure Regulator
		and Connector Kit
	7002941-07	8 Port Low Flow Flush Manifold without Check Valves, 1/4" Eaton Solenoid Valve (24 VAC), Step Down Transformer, 1/4" Brass
		Watts Pressure Regulator and Connector Kit
	0600423	Injection Kit, 9th Port
	7901238	Check Valve, 1/4" NPT x 3/8" Barb w/Hastelloy Spring, PTFE Ball and EPDM O-Ring, White Body
	7901237	Check Valve, 1/4" NPT x 3/8" Barb w/Hastelloy Spring, PTFE Ball and Viton O-Ring, Gray Body
	7912200	Poly Plug, 1/4" NPT

## KNIGHT LIMITED WARRANTY

Knight controls and pump systems are warranted against defects in material and workmanship for a period of ONE YEAR. All Electronic Control Boards have a TWO YEAR warranty. Warranty applies only to the replacement or repair of such parts when returned to the factory with a KRA number, freight prepaid and found to be defective upon factory inspection. Rubber and synthetic rubber parts such as "0" rings, diaphragms, squeeze tubing and gaskets are considered expendable and are not covered under warranty. Warranty does not cover liability resulting from performance of this equipment nor the labor to replace this equipment. Product abuse or misuse voids warranty. Knight products are not for use in potentially explosive environments. Any use of our equipment in such an environment is at the risk of the user. Knight does not accept any liability in such circumstances.

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