

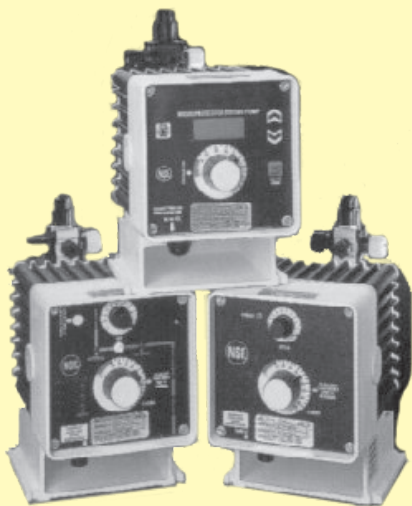


## PRECISE CHEMICAL ADDITION FOR:

**COOLING TOWERS, BOILERS, PLATING,  
CONDENSERS, RUST INHIBITORS,  
WASTE TREATMENT, WATER TREATMENT,  
BIOCIDES AND PH / ORP ADJUSTMENTS**



**SERIES 'A'**  
**0 - 48 GPD**



**SERIES 'B' & 'C'**  
**0 - 600 GPD**

- **Wide model selection**
  - Capacities to 25 GPH
  - Choice of control options
  - Standard and optional liquid ends to meet any application
- **Encapsulated electronics**

Pump electronics are enclosed in housing of corrosion-resistant polypropylene, protecting the pump from spilled chemical and corrosive atmosphere.
- **Pump status LED**

Provides visual indicator of pump operation
- **Capable of handling —**

Acids	Soaps	Wetting Agents
Caustics	Brighteners	Inhibitors
Flocculants	Detergents	Filter Aids
Chlorine	Dyes	...and many more
- **Inherent pressure relief**

Should the back pressure exceed the strength of the magnetic force developed by the power coil, the pump will stop stroking, preventing any damage and eliminating the need for a pressure relief valve.
- **Saves you money**

Power used only during discharge portion of each stroke. Minimum electrical consumption and low heat.
- **Low maintenance**

One moving unit, the armature-diaphragm assembly. No lubrication required. Modular construction provides easy replacement of components and major assemblies.
- **Free installation kit included**

Contains essential components for installation:  
Polyethylene suction & discharge tubing  
Foot valve & strainer  
Injection check valve
- **UL Listed      CE compliant**



**CONTROL OPTIONS**

**INTERNAL CONTROL, Series A1, B1, C1**

These pumps offer the versatility of independently adjustable stroke length and stroke frequency, allowing dual manual control of pump output.

**SERIES 'A' — .003 to 2.0 GPH (.17 to 126 ml/M)**

Series A\_4, A\_5 and A\_6 provide output ranges of 100:1.

Series A\_1 provides output ranges of 83:1.

**SERIES 'B' & 'C' — .008 to 25 GPH (.05 to 1578 ml/M)**

Series B and C provide output ranges of 100:1.

**INTERNAL / EXTERNAL CONTROL, Series A7, B7, C7**

These metering pumps offer the versatility of a selector switch for either internal (manual) or external (automatic) control. Perfect for proportional treatment installations, or for use with the A/D converter or ampere-time meters where pump stroke frequency must vary linearly in response to plating ampere-hours. These pumps respond to any external

switch closure, providing automatic stroke frequency control or proportional feeding. Series B7 & C7 also include adjustable electronic pressure control as a standard feature. This reduces the electrical load to the solenoid based on pump pressure required.

**MICROPROCESSOR CONTROL B9, C9**

These are programmable electronic pumps featuring microprocessor-based control which employs an LCD display and a 4-key tactile keypad. They also come with continuous memory back-up which insures the integrity of your programmed values in the event of a power failure and keypad adjustable pressure control which reduces noise, shock and vibration during operation. The pump can be run in either manual / external mode select (0-100 sph or 1-100 spm) or external modes of 4-20 mA input control, both direct or inverse. It can also multiply or divide incoming pulses from a voltage free reed switch, transistor, opto-coupler or Hall Effect sensor.

**SERIES 'A'**

MODEL & PRICE CODE NO. <sup>1</sup>			TUBING SIZE	OUTPUT GPH		OUTPUT ml/min.		MAXIMUM PRESSURE
INTERNAL CONTROL	INTERNAL/EXTERNAL CONTROL	MICROPROCESSOR CONTROL		Inches	MIN.	MAX.	MIN.	MAX.
A111-915SI	A711-915SI	AA941-455SI AA951-495SI AA961-465SI	1/4	.003	.25	.17	17	250 (17.3)
A141-915SI	A741-915SI		1/4	.005	.5	.33	33	250 (17.3)
A151-925SI	A751-925SI		3/8	.01	1.0	.63	63	110 (7.6)
A161-935SI	A761-935SI		3/8	.02	2.0	1.26	126	50 (3.4)

<sup>1</sup> Models shown ending in 'SI' include four-function value

<b>Voltage -- Standard:</b>	120 V / 1 / 50-60
<b>Optional:</b>	240 V / 1 / 50-60 (To order, change 3rd digit in Price Code No. from 1 to 2)
<b>Average input power:</b>	22 watts
<b>Maximum Dimensions:</b>	9.25"L x 4.05"W x 8"H (235 x 103 x 203mm)
<b>Suction Lift:</b>	4 feet (1.2 m)

<b>Liquid end -- Head &amp; Fittings:</b>	Polypropylene
<b>Balls:</b>	Ceramic
<b>Diaphragm &amp; Seal Rings:</b>	PTFE copolymers
<b>Stroke Length:</b>	20% minimum
<b>Stroke frequency:</b>	5 to 100 strokes per minute (adjustable)

**Consult Sales Department for optional liquid end selections.**



**SERIES 'B' & 'C'**

**SERIES 'B'**

MODEL & PRICE CODE NO. <sup>1</sup>			TUBING SIZE	OUTPUT GPH		OUTPUT ml/min.		MAXIMUM PRESSURE
INTERNAL CONTROL	INTERNAL/EXTERNAL CONTROL	MICROPROCESSOR CONTROL		Inches	MIN.	MAX.	MIN.	MAX.
B111-495SI	B711-495SI	B911-495SI	3/8	.008	1.6	.50	100	150 (10.3)
B121-495SI	B721-495SI	B921-495SI	3/8	.012	2.5	.79	158	100 (6.9)
B131-465SI	B731-465SI	B931-465SI	1/2	.022	4.5	1.42	284	50 (3.4)
B141-415SI	B741-415SI	B941-415SI	1/2	.035	7.0	2.21	442	30 (2.1)

**SERIES 'C'**

MODEL & PRICE CODE NO. <sup>1</sup>			TUBING SIZE	OUTPUT GPH		OUTPUT ml/min.		MAXIMUM PRESSURE
INTERNAL CONTROL	INTERNAL/EXTERNAL CONTROL	MICROPROCESSOR CONTROL		Inches	MIN.	MAX.	MIN.	MAX.
C111-465SI	C711-465SI	C911-465SI	1/2	.012	2.5	.79	158	150 (10.3)
C121-465SI	C721-465SI	C921-465SI	1/2	.02	4.0	1.26	252	100 (6.9)
C131-415SI	C731-415SI	C931-415SI	1/2	.045	9.0	2.84	568	60 (4.1)
C141-35T	C741-35T	C941-35T	1/2	.10	20.0	6.3	1262	25 (1.7)
-	C771-25T	-	1/2	.05	10.0	3.16	631	80 (5.5)
-	C781-35T	-	1/2	.125	25.0	7.9	1578	30 (2.1)

<sup>1</sup> Models shown ending in 'SI' include four-function value

<b>Voltage -- Standard:</b>	120 V / 1 / 50-60
<b>Optional:</b>	240 V / 1 / 50-60 (To order, change 3rd digit in Price Code No. from 1 to 2)
<b>Average input power:</b>	29 watts -- 'B' Series 44 watts -- 'C' Series 87 watts -- 'C77' Series
<b>Maximum Dimensions:</b>	11.63"L x 5.72"W x 9.25"H (295 x 145 x 235 mm)
<b>Suction Lift:</b>	4 feet (1.2 m)

<b>Liquid end -- Head &amp; Fittings:</b>	Polypropylene
<b>Balls:</b>	Ceramic
<b>Diaphragm &amp; Seal Rings:</b>	PTFE copolymers
<b>Stroke Length:</b>	10% minimum
<b>Stroke frequency:</b>	5 to 100 strokes per minute (adjustable)

**Consult Sales Department for optional liquid end selections.**

**ACCESSORIES**

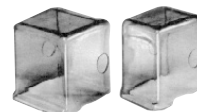
**WALL MOUNTING BRACKET ASSEMBLY**

A wall mounted pump is up and away from the chemical drum, minimizing the chance for mishap. Rugged, polyurethane coated steel bracket provides stable mounting surface. All hardware is included for mounting to stud, concrete or hollow block walls.

<b>PRICE CODE NO.</b>
34643

**SPLASH GUARDS**

Splash guards have a see through cover that protects against chemical sprays or splashes and accidental movement of the switch and adjustment knobs.



<b>DESCRIPTION</b>	<b>PRICE CODE NO.</b>
Series B & C	10583



**FOUR-FUNCTION VALVES**

Provide positive anti-syphoning and pressure release. Assist priming, easy depressurization of discharge line and pump head without removal of tubing or loosening of fittings.

DESCRIPTION	FOR USE ON	PRICE CODE NO.
1/4" O.D. tubing, polypro./TFE	All 1/4" tubing pumps	28010
3/8" O.D. tubing, polypro./TFE	All 3/8" tubing pumps	28022
1/2" O.D. tubing, PVDF/TFE	C_3 only	34626
1/2" O.D. tubing, polypro./TFE	All other 1/2" tubing pumps	25900

NOTE: Models C\_4 are not compatible with four-function valves.

**POLYETHYLENE SOLUTION TANKS with RIGID STRUCTURAL POLYETHYLENE COVERS**

These tanks are suitable for most corrosive- and non-corrosive chemical solutions; self-supporting, 5-gallon graduations. Tanks are resistant to ultraviolet light.



DESCRIPTION	PRICE CODE NO.
35 gal. (132 L) tank w/recess for mounting Series 'A' metering pump. Flooded suction design.	27400
50 gal. (189 L) tank with cover assembly	26350

**DRUM LIQUID LEVEL SWITCH**

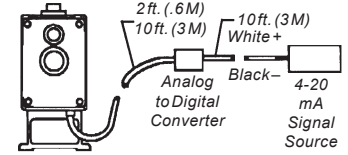
The liquid switch assembly will stop the chemical metering pump or any other pump as the level of liquid in the tank descends to just above the end of the float tube. At this point, it will also activate the customer supplied signal device. Corrosion resistant housing of glass fiber reinforced polypropylene. Chemical resistant polypropylene float. Duplex 115 plug receptacle for control of metering pump (normally closed) and low level signal device (normally open).



DESCRIPTION	PRICE CODE NO.
Electrical: 115V, 50/60Hz. Max load: 3 amps. For: 35 gal. (132L) tank assembly 50 gal. (189L) tank assembly	27417 26731
Electrical: 230V, 50Hz For: 50 gal. (189 L) tank assembly	26732

**ANALOG TO DIGITAL (A/D) CONVERTER for proportional feed**

Allows any A7, B7 or C7 metering pump to respond directly to a 4-20mA DC signal. Encapsulated electronics offer corrosion resistance to ensure trouble-free operation. Requires no external voltage supply and is ready to install - BNC connection requires no wiring for connection to pump. 100 ohm impedance allows several units to be operated from a single source for series loop control. Mounts into pump base.

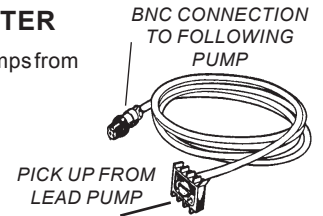


DESCRIPTION	PRICE CODE NO.
For Series AA7, B7, C7 metering pumps: 100 strokes per minute	MP-100

**PULSE TRANSMITTER**

To actuate two or more auxiliary pumps from lead pump for:

- Extra pumping capacity
- Multiple chemical pumping
- Proportional treatment
- 10ft. (3M) long.



PRICE CODE NO.
26006

**LOW LEVEL SWITCH ASSEMBLY**

This is an integral low level shut off switch for use with Series A7, B7, C7, A9, B9 and C9 metering pump. When your solution reaches a low level, the switch protects your metering pump by shutting the pump off, reducing wear caused by dry pumping action. PVC / ceramic construction.

PRICE CODE NO.
29190

**DRUM SAFETY WAND - SUCTION TUBE STRAIGHTENER**

This assembly is useful in preventing curling of the suction tube, keeping the foot valve at the bottom of the tank and providing a safer transfer of the suction line from tank-to-tank.

DESCRIPTION	PRICE CODE NO.
45" long, 2" NPT connection	10783
45" long, 2" buttress connection	26783