SERFILCO®

METERING PUMPS SPECIFICATIONS

TECHNICAL BULLETIN TP-115A

SERIES 'A'

Refer to Bulletin P-607

GENERAL

Chemical metering pumps shall be positive displacement, diaphragm type pumps. Output volume shall be adjustable while pumps are in operation from zero to maximum capacity of:

MODEL	GALLONS PER HOUR		mL or cc PER MINUTE	
	MIN.	MAX.		
A14, A74	.006	.66	.38	41.6
A15, A75	.01	1.0	.63	63.0
A16, A76	.02	2.0	1.26	126.0
A17, A77	.006	.42	.40	26.3
A18, A78	.001	.75	.72	47.3

A1 SERIES

Adjustment shall be by readily accessible dial knobs, one for changing stroke length and the other for changing stroke frequency. Both knobs are to be located opposite the liquid handling end. On-off switch shall be integral with frequency control, "off" position to be below lowest frequency setting.

A7 SERIES

Control of A7 Series metering pumps shall be selectable between internal and external pulsing by means of a switch integral with frequency control knob. "External" position to be below lowest internally paced frequency setting. Stroke length shall be adjustable by means of readily accessible dial knob. When in external pulsed mode A7 series units shall accept signals from Flowmeter-Pulser assemblies or Current-To-Frequency converter without the use of electrical timer or internal timer.

Chemical metering pumps shall be capable, without a hydraulically backed diaphragm, of injecting chemicals against pressures up to:

MODEL	psig (Bar)
A14, A74	250 PSI (17.3 Bar)
A15, A75	110 PSI (7.6 Bar)
A16, A76	50 PSI (3.4 Bar)
A17, A77	140 PSI (9.7 Bar)
A18, A78	80 PSI (5.5 Bar)

DRIVE

The pump drive shall be totally enclosed with no exposed moving parts. Solid state electronic pulser shall be fully encapsulated with no exposed printed circuit etch and be supplied with quick connect terminals of at least 3/16" (4.75 mm) wide. Electronics shall be housed in chemical resistant enclosure at the rear of the pump for maximum protection against chemical spillage. Electrical power consumption shall not exceed 22 watts per hour under full speed and maximum pressure conditions. Pump weight shall not exceed 14 lbs. (6.4kg.)

AUTOMATIC PRESSURE RELIEF

To eliminate need for pressure relief valve, diaphragm shall automatically stop pulsating when discharge pressure exceeds pump pressure rating by not more than 35%.

MATERIAL

Chemical metering pump housing shall be of chemically resistant glass fiber reinforced thermoplastic. All exposed fasteners shall be stainless steel. Chemical metering pump valves shall be ball type, with ceramic balls[1] seating on combination valve seat and seal ring. Valve seat and seal ring shall be renewable by replacing only the combination seat-seal ring[2]. Pump head shall be of polypropylene[3] material capable of resisting the pumped chemical. Fittings and connections at pump head shall be polypropylene[4].

CHECK VALVES AND TUBING

A total of 16 ft. (4.8 m) of polyethylene tubing[5] shall be provided per pump complete with compressing connections. A foot valve with integral one piece strainer shall be provided for the suction line, and an injection check/back pressure valve with ½"NPT male connection for the injection point. The injection check valve shall incorporate a dilating orifice which prohibits scale formation and accumulation of crystalline deposits.

NOTES:

[1] TFE may be specified.
[2] Polyprel™, TFE may be specified.
[3] PVDF and PVC may be specified
[4] PVDF may be specified
[5] 6 ft. (1.8m) of vinyl suction tubing may be specified in place of polyethylene for the suction side only. ¼" pipe thread may be specified.

GENERAL

Chemical metering pumps shall be positive displacement, diaphragm type pumps. Output volume shall be adjustable while pumps are in operation from zero to maximum capacity of:

MODEL	GALLONS PER HOUR		mL or cc PER MINUTE	
	MIN.	MAX.	MIN.	MAX.
B11, B71	.008	1.6	.05	100
B12, B72	.012	2.5	.79	158
B13, B73	.022	4.5	1.42	284
B14, B74	.04	7.0	2.21	442
C11, C71	.012	2.5	.79	158
C12, C72	.02	4.0	1.26	252
C13, C73	.04	9.0	2.84	568
C14, C74	.10	20.0	6.3	1262

B1 & C1 SERIES

Adjustment shall be by means of readily accessible dial knobs, one for changing stroke length and the other for changing stroke frequency. Both knobs are to be locate opposite the liquid handling end.

B7 & C7 SERIES

Adjustment shall be selectable between internal and external pulsing by means of a 3-position center-off switch. When in external pulsed mode, B7 & C7 series units shall accept signals from flowmeter-Pulser Assemblies or current to Frequency Converter without the use of electrical timer or internal timer. External pulse circuit voltage shall not exceed 16 volts.

Chemical metering pumps shall be capable, without a hydraulically backed diaphragm, of injecting chemicals against pressures up to:

MODEL	psig (Bar)
B11, B71	150 PSI (10.3 Bar)
B12, B72	100 PSI (6.9 Bar)
B13, B73	50 PSI (3.4 Bar)
B14, B74	30 PSI (2.07 Bar)
C11, C71	150 PSI (10.3 Bar)
C12, C72	100 PSI (6.9 Bar)
C13,C73	60 PSI (4.1Bar)
C14, C74	25 PSI (1.7 Bar)

DRIVE

The pump drive shall be totally enclosed with splash proof control panel and no exposed moving parts. Solid state electronic pulser shall be fully encapsulated with no exposed printed circuit etch and with quick connect terminals at least 3/16" (4.75 mm) wide. Electronics shall be housed in chemical resistant enclosure at the rear of the pump for maximum protection against chemical spillage. Electrical power consumption shall not exceed 29-33 watt hours per hour under full speed and maximum pressure conditions (15 lbs).

AUTOMATIC PRESSURE RELIEF

To eliminate need for pressure relief valve, diaphragm shall automatically stop pulsating when discharge pressure exceeds pump pressure rating by not more than 35%.

MATERIAL

Chemical metering pump housing shall be of chemically resistant glass fiber reinforced thermoplastic with a glass fiber reinforced polypropylene EPU carrier. All exposed fasteners shall be stainless steel. Chemical metering pump valves shall be ball type, with ceramic balls seating on combination valve seat and seal ring. Valve seat and seal ring shall be renewable by replacing only the combination seat-seal ring[2]. Pump head shall be of polypropylene[3] material capable of resisting the pumped chemical. Fittings and connections at pump head shall be PVC and/or polypropylene.

CHECK VALVES AND TUBING

A total of 16 ft. (4.8m) of polyethylene tubing[4] shall be provided per pump complete with compressing connections. A foot valve with integral one piece strainer shall be provided for the suction line, and an injection/back pressure[5] check ½"NPT male connection for the injection point. The injection check valve shall incorporate a dilating orifice which inhibits accumulation of crystalline deposits.

NOTES:

[1] TFE may be specified.
[2] Viton® or TFE may be specified.
[3] PVC may be specified
[4] 6 ft. (1.8m) of vinyl suction tubing may be specified in place of polyethylene for the suction side only. ¼" pipe thread may be specified.
[5] Anti-syphon pressure release valve may be specified for mounting on pump head discharge port.

F.O.B. Northbrook, Illinois Terms: Net 30 Days Minimum order $25.00

DISTRIBUTED BY

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