

# Wallace & Tiernan® Liquid Feed Systems

## Premia® 75 Solenoid Metering Pump

### Mega and Micro Series

Premia® 75 Mega and Micro solenoid activated diaphragm metering pumps provide economic reliable performance even during extended use. They are ideal for metering chemicals used in the treatment of water and wastewater or industrial use.

Standard control is manual by on-line stroke length adjustment and stroke frequency adjustment. Optional external control by 4-20 mA input or external pulse input, with stop function is available for the Mega Series. External control by 4-20 mA or 20-4 mA input or pulse input, with ratio control and stop function is standard on the Micro Series.

#### Key Features

##### Mega Series

- 19 sizes to cover a range of capacities up to 96.4 lph (25 gph) and pressures up to 12 bar (300 psi).
- Manual control by on-line adjustable stroke length, fixed stroke frequency.
- Optional external pulse control by 4-20 mA input or pulse input, with stop function.
- Auto degassing arrangements available up to 6.94 lph (1.85 gph).
- 3 function valve supplied as standard.
- 100:1 turndown ratio.
- Metering performance reproducible to within  $\pm 2\%$  of maximum capacity.
- Panel-mounted circuit breaker and indicator lights.
- ETL certified for indoor and outdoor use per UL standard 778, as well as CSA standard C22.2 and CE Mark.

##### Micro Series

- 19 sizes to cover a range of capacities up to 79 lph (21 gph) and pressures up to 21 bar (300 psi).
- 16-character dot matrix back-lit display for clear indication of operating conditions and alarms.
- Manual control by on-line adjustable stroke length and stroke frequency; stroke counting and timed interval operation also available.
- External control by 4-20 mA or 20-4 mA input or pulse input, with ratio control and stop function.

#### Key Benefits

- Reliable metering performance reproducible to  $\pm 2\%$  of maximum capacity
- Electable pump controls from manual or external by 4-20 mA input or pulse input (optional on Mega)
- Quick and economical liquid end maintenance

- Auto degassing arrangements available up to 6.94 lph (1.83 gph).
- Three-function valve supplied as standard.
- 1000:1 turndown ratio in manual mode.
- Metering performance reproducible to within  $\pm 2\%$  of maximum capacity.
- Panel-mounted circuit breaker and indicator lights.
- ETL certified for indoor and outdoor use per UL standard 778, as well as CSA standard C22.2 and CE Mark.



## Product Sheet

## Technical Data

### Capacity and Back Pressure

Mega Series (ME) Capacity, nominal				
Model	Capacity		Max. Back Pressure	
	lph	gph	bar	psi
00	0.5	0.13	21	300
01	0.8	0.21	17	250
02	1.9	0.5	17	250
03	3.2	0.85	17	250
06	6.4	1.7	17	250
H1	0.9	0.25	10	150
H2	1.9	0.5	10	150
H3	3.4	0.9	10	150
H7	6.6	1.75	10	150
10	9.5	2.5	10	150
12	11.9	3.15	10	150
M2	1.9	0.5	7	100
M3	2.3	0.6	7	100
M4	3.8	1.0	7	100
M7	7.0	1.85	7	100
19	18.9	5	7	100
30	30.3	8	3.3	3.3
38	37.9	10	2.4	2.4
79	94.6	25	2	2

Micro Series (MP) Capacity, nominal				
Model	Capacity		Max. Back Pressure	
	lph	gph	bar	psi
00	0.5	0.13	21	300
01	0.8	0.21	17	250
02	1.9	0.5	17	250
03	3.2	0.85	17	250
06	6.4	1.7	17	250
H1	0.9	0.25	10	150
H2	1.9	0.5	10	150
H3	3.4	0.9	10	150
H7	6.6	1.75	10	150
10	9.5	2.5	10	150
12	11.9	3.15	10	150
M2	1.9	0.5	7	100
M3	2.3	0.6	7	100
M4	3.8	1.0	7	100
M7	7.0	1.85	7	100
19	18.9	5	7	100
30	30.3	8	3.3	50
38	37.9	10	2.4	35
79	78.9	20.8	2	30

### Pump Technical Data

Pump	Mega	Micro
<b>Materials of Construction</b>		
<b>Pump Head</b>	Glass-filled Polypropylene (GFPPPL), Polyvinylidene Fluoride (PVDF), Styrene-Acrylonitrile (SAN), PVC, 316 SS	
<b>Diaphragm</b>	Teflon®-faced, Fabric-reinforced, Hypalon®-backed, metal insert	
<b>Check Valves</b>		
<b>Seats/O-rings</b>	Teflon®, Hypalon®, Viton®	
<b>Balls</b>	Ceramic, Teflon®, 316 SS, Hastalloy® C	
<b>Fittings</b>	GFPPPL, PVDF, PVC, 316 SS	
<b>Injection Valve/Foot Valve</b>	Same as fittings and check valves selected	
<b>Tubing</b>		
<b>Suction</b>	1.2 m (4 ft) clear PVC	
<b>Discharge</b>	8 feet white polyethylene (PE) Tubing may also be supplied in PVDF, polypropylene or black UV-inhibited PE	
<b>Connections</b>		
<b>Tubing</b>	6 mm ID x 9 mm OD (1/4" ID x 3/8" OD) 9 mm ID x 12 mm OD (3/8" ID x 1/2" OD) 5 mm ID x 8 mm OD 3/16" ID x 5/16" OD - capacities to 1.89 lph (0.50 gph) 12 mm x 19 mm (1/2" x 3/4" OD) - Model 79 only	
<b>Piping</b>	1/4" FNPT 1/2" FNPT	
<b>Reproducibility at Max. Capacity</b>	±2%	
<b>Maximum Viscosity</b>	10,000 CPS with spring loaded ball check valves Viscosities measured with Brookfield Viscometer, No. 2 & 3 spindles, 1.5 RPM	
<b>Maximum Stroke Frequency</b>	125 SPM	
<b>Stroke Length Turndown Ratio</b>	10:1	
<b>Stroke Freq. Turndown Ratio</b>	10:1	100:1
<b>Maximum Suction Lift</b>		
<b>at 1 CPS</b>	3.1 m (10 ft) once primed	
<b>at 3000 CPS</b>	1.1 m (3.5 ft) once primed	
<b>Power input</b>	115 VAC, 50/60 Hz, 1 Ph, 230 VAC, 50/60 Hz, 1 Ph	
<b>Average Input Power</b>	130 Watts @ Max. SPM	
<b>Average Current Draw</b>	@ 115 VAAC - 1 Amp, @ 230 VAC - 0.5 amps	
<b>Peak Input Power</b>	300 Watts	
<b>Signal Relay</b>	N/A	24 VDC, 10 mA
<b>Power Relay</b>	N/A	250 VAC, 50/60 hZ, 0.5 Amps
<b>Maximum Temperature</b>	104° F (40° C)	

### Notes

- Optional five function valve is not available on auto degassing or > 1000 CPS arrangements.
- Foot valve/sinker/strainer is not available on >3000 CPS arrangements.
- Auto degassing liquid end is only available with PVC head, ceramic balls, Viton seals/O-rings and 5/16" OD suction, 3/8" OD discharge tubing.
- Pump heads in SAN are not available on models rated above 100 PSI (7 bar).
- Pumps heads in PVC are not available on models rated above 150 PSI (10 bar).
- Pump heads in 316 SS and PVDF are not available with capacity selection 79.

### Dimensions

For complete dimensions , please refer to literature WT.460.150.105.UA.CN.

### Shipping weights:

5.9 to 11.4 kgs (13-25 lbs) depending on model selected.

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