

Wallace & Tiernan® Liquid Feed Systems

Premia® 75 Solenoid Metering Pump

Mini and Mini-DC Series

Premia® 75 Mini and Mini-DC solenoid activated diaphragm metering pumps provide economic, simple serviceability. They are ideal for metering chemicals used in the treatment of water/wastewater or industrial use.

They provide reliable metering performance even during extended use. The solenoid is separately encapsulated in a fin cooled, thermo-conductive enclosure that effectively dissipates heat and provides stability of output.

Key Features

Mini Series

- 19 sizes to cover a range of capacities up to 96.4 lph (25 gph) and pressures up to 20 bar (300 psi).
- Manual control by on-line adjustable stroke length, fixed stroke frequency.
- Optional external pulse control or external stop.
- 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 $\pm 3\%$ of maximum capacity.
- ETL certified for indoor and outdoor use per UL standard 778, as well as CSA standard C22.2 and NSF standard 50.

Econo Series

- 4 sizes to cover a range of capacities up to 4.7 lph (1.25 gph) and back pressures up to 17 bar (250 psi).
- Manual control by on-line adjustable stroke length, fixed stroke frequency.
- Operates from 12 VDC supply.
- Auto degassing arrangements available up to 6.94 lph (1.83 gph).
- 3 function valve supplied as standard.
- 100:1 turndown ratio.
- Metering performance reproducible to within $\pm 3\%$ of maximum capacity.

Key Benefits

- Reliable metering pump performance with state-of-the-art ball and seat design
- Choice of AC or DC operating power supplies
- Able to handle viscosities to 10,000 CPS
- Quick and economical valve and liquid end maintenance
- Long life composite TFE-faced diaphragm



Product Sheet

Technical Data

Capacity and Back Pressure

Mini Series (MI) 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
04	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
H4	6.6	1.75	10	150
H5	9.5	2.5	10	150
H6	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	1.58	7	100
M8	18.9	5	7	100
N7	30.3	8	3.3	50
P7	37.9	10	2.4	35
Q8	94.6	25	2	30

Mini-DC Series (MD) Capacity, nominal				
Model	Capacity		Max. Back Pressure	
	lph	gph	bar	psi
H1	0.9	0.25	10	150
H2	1.9	0.50	10	150
M4	3.8	1.0	7	100
M7	7	1.85	7	100

Notes

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

Pump Technical Data

Pump	Mini	Mini-DC
Materials of Construction		
Pump Head	Glass-filled Polypropylene (GFPP), Polyvinylidene Fluoride (PVDF), Styrene-Acrylonitrile (SAN), PVC, 316 SS	
Diaphragm	Teflon®-faced, Fabric-reinforced, Hypalon®-backed, metal insert	
Check Valves		
Seats/o-rings	Teflon®, Hypalon®, Viton®	
Balls	Ceramic, Teflon®, 316 SS, Hastalloy® C	
Fittings	GFPP, PVDF, PVC, 316 SS	
Injection Valve/Foot Valve	Same as fittings and check valves selected	
Tubing		
Suction	1.2 m (4) ft clear PVC	
Discharge	8 ft white polyethylene (PE) Tubing may also be supplied in PVDF, polypropylene or black UV-inhibited PE	
Connections		
Tubing	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)	
Piping	1/4" FNPT	
Reproducibility at Max. Capacity	±3%	
Maximum Viscosity	10,000 CPS with spring loaded ball check valves	H1, H2 - 300 CPS (consult factory for viscosities > 300 CPS) M4, M7 - 1000 CPS
	Viscosities measured with Brookfield Viscometer, No. 2 & 3 spindles, 1.5 RPM	
Maximum Stroke Frequency	125 SPM	
Stroke Length Turndown Ratio	10:1	
Stroke Freq. Turndown Ratio	10:1	
Maximum Suction	1.5 m (5 ft) once primed	
at 1 CPS	3.1 m (10 ft) once primed	1.5 m (5 ft) once primed
at 3000 CPS	1.1 m (3.5 ft) once primed	N/A
Power input	115 VAC, 50/60 hz, 1 ph 230 VAC, 50/60 hz, 1 ph	12.6 VDC nominal Range 11.8 - 14.0 VDC
Average Input Power	50 watts @ max. spm	
Average Current Draw	@ 115 VAC - 0.6 amp @ 230 VAC - 0.3 amps	H1, H2, M4 - 4.0 amps M7 - 8.0 amps
Peak Input Power	130 watts	
Maximum Temperature	40° C (104° F)	

Dimensions

For complete dimensions, please refer to literature WT.460.150.100.UA.CN.

Shipping Weights

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

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