CHEMICAL DOSING LMI CHEMICAL DOSING PUMPS - PD SERIES

LMI Series PD Pumps

The new redesigned pumps replace the P0, P1, P+0 & P+1 pumps.



Output 4.8ml to 7.6L/hr Speed Adjustment only

External Control Inputs:

pulse, stop/start & level indication

LCD Graphical display:

for intuitive navigation to configure, operate and view status from a distance

Calibration Assist :

Allows simple calibration adjustment on screen

StayPrime Degassing Technology:

Automates the priming cycle after a period of idle time

<u>System & User Totalisers</u>: Logs pump strokes, estimated volume and power cycles, indicates when service due.

Code	Max Output Lt/hr	Max. Pressure	Delivery Hose	Price		
LMI PD0 PUMPS - MANUAL STROKE CONTROL						
PD745-920N2	2.6 litre/hr	@ 17.0 Bar Max.	1/4" OD Hose	820.00		
PD755-930N2	4.2 litre/hr	@ 10.2 Bar Max.	3/8" OD Hose	840.00		
PD765-940N2	7.6 litre/hr	@ 4.8 Bar Max.	3/8" OD Hose	840.00		

Each pump is supplied with Injection Check Valve, Foot Valve, & 6 metres of Tubing.

LMI Series PD Pumps The

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PD0 Range

Features:



Please note the PD0 can not be wired directly into the controller and require an external relay. See LMI Letter on page 3.

Advanced Electronics with dynamic compensation for temperature and voltage conditions

🦩 <u>Improved Drive Design</u>

🦩 <u>Dual Voltage</u> : 110/240V

Fast Prime as Standard

Speed Adjustment only

🦩 🛮 Output 4.8ml to 7.6L/hr

0.8 - 160 spm;

200:1 turn down :

IP65 Housing

+/- 3% accuracy/repeatability

Suction Lift 1.5m

👂 Pressure upto 30.6 bar

Imperial & metric fitting

 \raturer° Liquid & Ambient Temperature between -10 & 50 $^{\circ}$ C

Supplied with Injection Valve, Foot Valve &
 6m of MDPE Tubing (Except 316 SS versions)

PD Series

Performance Specifications

Chemical Metering Pump

Designed to Last

Introducing the PD Series chemical metering pump, the new standard in water treatment. This upgrade to LMI's most popular pump series includes an improved drive design, all new electronics, and proven FASTPRIME™ liquid ends. Available in Manual or Enhanced control models, the PD Series pump fits seamlessly into your process control application. The Manual model offers straightforward control without the need for tedious calculations. Its split-scale dial ensures precision, even at lower flow rates. The Enhanced model offers external control and a large graphical display to provide intuitive access to advanced features such as calibration assist, system and user totalizers, the new STAYPRIME™ degassing technology, and more.

Trusted by water treatment professionals for more than a generation, the PD Series chemical metering pump will continue to earn your trust for years to come.

NEW COLMIC COLMI

Manual Model

Enhanced Model

	[BAR]								
			PDx1					Outp	ut Ra
_	20.4	:		PDx4				Press	
Ē	13.6	200		The same of the sa				Max	x Stro
ess	10.2	150						Inst	tallati
Œ	20.2	150		0,		PDx5		Supp	ly Vol
	6.8	100				10000		Steady S	tate A
								Repeata	ble A
	3.4	50					POx	16	
		0	0.25	0.50	0.75	1.00	1.50	2.00 (GPH)	
			0.9	1.9	2.8	3.8	5.7	7.6 [LPH]	1
					Capacit	У			

Output Range	.002 – 2.0 GPH (.008 – 7.6 LPH)	
Pressure Range	50-450 PSI (3.4-30.6 BAR)	
Max Stroke	160 SPM	
Installation	Indoor/Outdoor	
Supply Voltage	115-230V / 50-60Hz	
Steady State Accuracy	+/- 3%	
Repeatable Accuracy	+/- 3%	

FastPrime™ Liquid Ends*

	PSI	GPH	BAR	LPH
PDx1	450	0.10	30.6	0.38
	300	0.20	20.4	0.76
	150	0.25	10.2	0.95
PDx4	250	0.35	17.0	1.32
	150	0.52	10.2	1.97
	50	0.68	3.4	2.57
PDx5	150	0.80	10.2	3.03
	110	1.00	7.5	3.79
	30	1.10	2.0	4.20
PDx6	70	1.70	4.8	6.44
	60	1.85	4.1	7.00
	50	2.00	3.4	7.57

*Standard on PD0 and PD7 models

Features and Benefits

- Shared drive platform with universal 115-230V, 50/60 Hz power supply
- Flows from 2 GPH (7.57 LPH) up to 450 PSI (30.6 BAR)
- Simplified capacity control with constant stroke length to maintain calibration across the adjustable range
- Advanced electronics with dynamic compensation for temperature and voltage conditions
- FastPrime[®] liquid ends (standard) that allow fast and easy priming with integrated bleed valve
- AutoPrime[®] liquid ends (optional), designed specifically for off-gassing liquids (See page 4 for performance specifications)
- Rugged construction with NEMA 4X/IP 65 housing for the harshest environments and outdoor use
- Compact footprint for efficient use of space in process applications or OEM configuration
- Agency certifications NSF 61 and 50 (pending), ETL, CE
- Built on decades of experience and fully backed by LMI's two-year warranty

Enhanced Functionality (PD7)

- 2.4" Color LCD Intuitive navigation allows you to configure and operate with ease view status and alerts from a distance to confirm safe operation
- External Control Inputs Automate your process with pulse pacing, remote start/stop, and tank level indication – ideal for proportional dosing
- Calibration Assist Simply draw from a column and adjust the estimated value on-screen to the measured actual – calibration is that easy
- System & User Totalizers An odometer for your pump that logs pump strokes, estimated volume, and power cycles – confirm pump operation between visits
- StayPrime™ Degassing Technology Automates the priming cycle after a period of idle pump time to ensure prime



PLEASE READ BEFORE PURCHASING A PD0 PUMP



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December 5, 2019

To whom it may concern,

LMI has recently received multiple reports regarding the interaction between our PD0 pumps and certain controllers commonly used in the European Region. Controllers that have been mentioned include: Ezetrol, Kuntze, and Hach Lange.

The reports describe relays that "latch" or "stick", either temporarily or indefinitely. LMI has performed an extensive testing with the Ezetrol and Kuntze controllers and have replicated this issue with our PD Series and P Series pumps. We performed the same tests our new Liquitron DM7500 and legacy DC4500 controllers, and were NOT able to reproduce the issue.

Each reported controller describes in their manual that their relays (and accompanying circuitry) are not designed for inductive loads. LMI pumps have an inductive load. Our PD Series pumps produce a marginally higher inductive load than our P Series pumps, which helps explain the timing of this concern.

Each controller IOM warns against Switch Mode power supplies or inductive loads, offering an alternate wiring recommendations or warnings for such use cases:

Kuntze manual (page 16, Neon_Multi_Eng_2017022): "When using the relays, mind that with inductive loads, interference must be suppressed. If that is not possible, the relay must be protected at the terminal block by a resistance-capacity filter or, in case of direct current, by a free-wheeling diode."

Ezetrol manual (page 43, WT.050.500.200.DE.IM.0817): "When connecting inductive or capacitive loads (e.g. load with integrated switching power supply), an additional power relay with suitable specification must be provided."

Hach Lange manual (page 15,DOC023.53.80040): "The relays are not rated for inductive loads."

We recommend following these manufacturer's warnings, even if no issues have been observed. Alternatively, we offer a PD7 with a remote start/stop that avoids this concern altogether. Wiring instructions/wiring diagrams can be found in the Manuals for :

Kuntze, Neon_Multi_Eng_2017022 ,page 18, Ezetrol , WT.050.500.200.DE.IM.0817,page 149 Hach Lange, DOC023.53.80040 ,page 17

Sincerely,

Amélie Drouard Product & Brand Manager / Water Treatment & General Industry EMEA MILTON ROY

