

# TD Series Chemical Metering Pump

## Accurate, Efficient, Reliable

Introducing the TD Series from LMI Pumps, the most versatile chemical metering pump on the market. This new generation of pumps boasts the most advanced control features from manual speed adjustment, to full SCADA integration and remote control, and available MODBUS, PROFIBUS and Bluetooth connected units. All TD Series Liquid Ends are new from LMI with improved materials, double ball check valves, and newly designed over-molded diaphragms proven to operate at continuous duty for over 40 million strokes. All Liquid Ends are designed with proven FASTPRIME™ technology for quick and easy commissioning and priming of the units. Available in 4 models, Manual, Advanced, COMMs Control Modbus TCP/RTU and COMMs Control Profibus, the TD Series pump fits seamlessly into your process control application. The Manual model offers simple speed control while maintaining the accuracy, precision, and durability of the enhanced drive system. The Advanced model offers numerous internal and external controls and a large TFT display to provide intuitive access to advanced features such as calibration assist, multiple digital IOs and speed input and output controls, batch and dose mode, slow mode, system and user totalizers, Bluetooth, and more. The COMMs model offers all the same functions as the Advanced model with the addition of industrial protocol communications.



## Performance Specifications

	PSI	GPH	BAR	LPH
<b>TDX2</b>	250	2.5	17.2	9.5
<b>TDX3</b>	150	4	10.3	15.1
<b>TDX4</b>	100	10	6.9	37.9
<b>TDX5</b>	75	16	5.2	60.6

<b>Output Range</b>	.003 – 16.0 GPH (.01 – 60.6 LPH)
<b>Pressure Range</b>	25-250 PSI (1.7-17.2 BAR)
<b>Max Stroke</b>	187 SPM
<b>Installation</b>	Indoor/Outdoor
<b>Supply Voltage</b>	100-230V / 50-60 Hz
<b>Steady State Accuracy</b>	+/- 1.5%
<b>Repeatable Accuracy</b>	+/- 3%
<b>Turndown</b>	1,000:1

## Features and Benefits

- Revolutionary FluxDrive™ technology with fractional turndown capability, reduced weight, increased efficiency, and universal 115-230V, 50/60 Hz power supply
- 4 available sizes with flows up to 16 GPH (60.6 LPH) and up to 250 PSI (17.2 BAR)
- Best-in-class electronic components and enhanced control for full SCADA integration and advanced system process control features
- Standard FastPrime™ liquid ends that allow fast and easy priming with integrated bleed valve
- Field upgradable firmware via USB-C drive interface for always current feature set and firmware upgrades
- Rugged construction with NEMA 4X / IP 66 housing for the harshest environments and outdoor use
- Compact footprint for efficient use of space in process applications or OEM configuration with removable mounting baseplate
- Standardized M12 cable connection for easy commissioning and setup of all inputs and outputs
- Agency certifications - NSF 61, ETL, CE, and UKCA
- 4.3" Color TFT display with Intuitive navigation, enabling easy configuration, full digital manual control of advanced pumps and visibility to running status, alarms, logs, and system configurations
- External Control Inputs - Automate your process with pulse batch modes, 4 analog 4-20mA inputs, remote start/stop, and multiple sensor inputs including tank level indication, auto degassing technology, pressure sensors, leak detection and more
- Calibration Assist - Simply draw from a column and adjust the estimated value on-screen to the measured volume
- System & User Totalizers - An odometer for your pump that logs pump strokes, estimated volume, and power cycles – confirm pump operation between visits
- AccuPrime™ degassing technology for automatic degassing of the discharge line for stay-prime functionality
- Leak detection sensor integrated into the liquid ends for reliable detection of leaks and shutoff alarms and output relays for full safety and system control

**TDx2**

**OUTPUT CODE 2** \_\_\_\_\_ 0.0 - 2.5 GPH (0.0 - 9.5 LPH); 250 psi (17.2 bar)

Drive End	Note: Cordsets from the accessories table may be required for the customer to connect to desired input/output.								151 SPM Max.
Control	Description								
TD092	Manual Control								
TD102	Advanced Pulse Input, Digital Inputs, Output Relays, Remote Start Stop, Tank Level Full Analog								
TD112	COMMs MODBUS TCP, RTU, Full Advanced								
TD122	COMMs PROFIBUS, Full Advanced								
Power Code	Voltage	Frequency		Plug					
1	Universal	50-60 HZ		110 - 120V US Plug					
2	Universal	50-60 HZ		220 - 240V US Plug					
3	Universal	50-60 HZ		220 - 240V DIN Plug					
5	Universal	50-60 HZ		220 - 240V UK Plug					
6	Universal	50-60 HZ		220-240V Aus/NZ Plug					
7	Universal	50-60 HZ		220-240V Swiss Plug					
Liquid End	Head	Fittings	Balls	Valve	Connections	Suction/Discharge	Cartridge	Valve or Seal Ring	RPM Kit
FastPrime™ Machined									
599SI	Acrylic	PVDF	PTFE	MFV	PE 1/4" O.D.			Polyprel®	RPM-599
599NI	Acrylic	PVDF	PTFE	-	PE 1/4" OD			Polyprel®	RPM-599
599AI	Acrylic	PVDF	PTFE	-	PE 1/4" O.D.			Polyprel®	RPM-599
599HI	Acrylic	PVDF	PTFE	MFV	PE 1/4" OD			Polyprel®	RPM-599
597NP	316 SS	316 SS	316 SS	-	1/4" NPT			316 SS/PTFE	RPM-597
595SI	PP	PP	Ceramic	MFV	PE 1/4" OD			PTFE	RPM-593
595NI	PP	PP	Ceramic	-	PE 1/4" O.D.			PTFE	RPM-593
595AI	PP	PP	Ceramic	-	PE 1/4" OD			PTFE	RPM-593
595HI	PP	PP	Ceramic	MFV	PE 1/4" O.D.			PTFE	RPM-593
596VI	PP	PP	316 SS	-	PE .5" Vinyl .938"			PTFE	RPM-596
596PI*	PP	PP	316 SS	-	PE .5" Vinyl .938"			PTFE	RPM-596
FastPrime™ Molded									
592SI	PVDF	PVDF	Ceramic	MFV	PE 1/4" O.D.			Polyprel®	RPM-592
592NI	PVDF	PVDF	Ceramic	-	PE 1/4" OD			Polyprel®	RPM-592
592AI	PVDF	PVDF	Ceramic	-	PE 1/4" O.D.			Polyprel®	RPM-592
592HI	PVDF	PVDF	Ceramic	MFV	PE 1/4" OD			Polyprel®	RPM-592
594SI	PVDF	PVDF	Ceramic	MFV	PE 1/4" O.D.			PTFE/Polyprel®	RPM-594
594NI	PVDF	PVDF	Ceramic	-	PE 1/4" OD			PTFE/Polyprel®	RPM-594
594AI	PVDF	PVDF	Ceramic	-	PE 1/4" O.D.			PTFE/Polyprel®	RPM-594
594HI	PVDF	PVDF	Ceramic	MFV	PE 1/4" OD			PTFE/Polyprel®	RPM-594
593SI	PVDF	PVDF	Ceramic	MFV	PE 1/4" O.D.			PTFE	RPM-593
593NI	PVDF	PVDF	Ceramic	-	PE 1/4" OD			PTFE	RPM-593
593AI	PVDF	PVDF	Ceramic	-	PE 1/4" O.D.			PTFE	RPM-593
593HI	PVDF	PVDF	Ceramic	MFV	PE 1/4" OD			PTFE	RPM-593
TD092	1	- 599SI							

RPM Kit	Contents	
FastPrime™		
RPM-599	*O-Rings	*Hardware kit
RPM-593	*Shaft Seal	*Liquifram
RPM-592	*Check Valve Cartridges	*Injection Valve Cartridge
RPM-594		
RPM-596	*Shaft Seal	*Hardware kit
	*Seal Ring Seats	*Liquifram
		*Clamp Rings
RPM-597	*Shaft Seal	*Hardware kit
	*Check Valve	*Liquifram

Accessories	
Part Number	Description
TNA40100	Degas Solenoid
TNA40200	Flow Verification
TNA40300	Leak Detection
TNP20200	Accessory Cable

\*PI 316 SS LE includes bleeder port

**TDx3**

**OUTPUT CODE 3** ————— 0.0 - 4.0 GPH (0.0 - 15.1 LPH); 150 psi (10.3 bar)

Drive End									
Control	Description								
TD093	Manual Control								
TD103	Advanced Pulse Input, Digital Inputs, Output Relays, Remote Start Stop, Tank Level Full Analog								
TD113	COMMs MODBUS TCP, RTU, Full Advanced								
TD123	COMMs PROFIBUS, Full Advanced								
	Power Code	Voltage			Frequency		Plug		
	1	Universal			50-60 HZ		110 - 120V US Plug		
	2	Universal			50-60 HZ		220 - 240V US Plug		
	3	Universal			50-60 HZ		220 - 240V DIN Plug		
	5	Universal			50-60 HZ		220 - 240V UK Plug		
	6	Universal			50-60 HZ		220-240V Aus/NZ Plug		
	7	Universal			50-60 HZ		220-240V Swiss Plug		
	Liquid End	Head	Fittings	Balls	Valve	Connections Suction/Discharge	Cartridge Valve or Seal Ring		RPM Kit
FastPrime™ Machined									
	589SI	Acrylic	PVDF	PTFE	MFV	PE 3/8" O.D.	Polyprel®		RPM-589
	589NI	Acrylic	PVDF	PTFE	-	PE 3/8" OD	Polyprel®		RPM-589
	589AI	Acrylic	PVDF	PTFE	-	PE 3/8" O.D.	Polyprel®		RPM-589
	589HI	Acrylic	PVDF	PTFE	MFV	PE 3/8" OD	Polyprel®		RPM-589
	587NP	316 SS	316 SS	316 SS	-	1/4" NPT	316 SS/PTFE		RPM-587
	585SI	PP	PP	Ceramic	MFV	PE 3/8" OD	PTFE		RPM-583
	585NI	PP	PP	Ceramic	-	PE 3/8" O.D.	PTFE		RPM-583
	585AI	PP	PP	Ceramic	-	PE 3/8" OD	PTFE		RPM-583
	585HI	PP	PP	Ceramic	MFV	PE 3/8" O.D.	PTFE		RPM-583
	586VI	PP	PP	316 SS	-	PE .5" Vinyl .938"	PTFE		RPM-586
	586PI	PP	PP	316 SS	-	PE .5" Vinyl .938"	PTFE		RPM-586
FastPrime™ Molded									
	582SI	PVDF	PVDF	Ceramic	MFV	PE 1/4" O.D.	Polyprel®		RPM-582
	582NI	PVDF	PVDF	Ceramic	-	PE 1/4" OD	Polyprel®		RPM-582
	582AI	PVDF	PVDF	Ceramic	-	PE 1/4" O.D.	Polyprel®		RPM-582
	582HI	PVDF	PVDF	Ceramic	MFV	PE 1/4" OD	Polyprel®		RPM-582
	584SI	PVDF	PVDF	Ceramic	MFV	PE 1/4" O.D.	PTFE/Polyprel®		RPM-584
	584NI	PVDF	PVDF	Ceramic	-	PE 1/4" OD	PTFE/Polyprel®		RPM-584
	584AI	PVDF	PVDF	Ceramic	-	PE 1/4" O.D.	PTFE/Polyprel®		RPM-584
	584HI	PVDF	PVDF	Ceramic	MFV	PE 1/4" OD	PTFE/Polyprel®		RPM-584
	583SI	PVDF	PVDF	Ceramic	MFV	PE 1/4" O.D.	PTFE		RPM-583
	583NI	PVDF	PVDF	Ceramic	-	PE 1/4" OD	PTFE		RPM-583
	583AI	PVDF	PVDF	Ceramic	-	PE 1/4" O.D.	PTFE		RPM-583
	583HI	PVDF	PVDF	Ceramic	MFV	PE 1/4" OD	PTFE		RPM-583
<b>TD092</b>	<b>1</b>	<b>- 599SI</b>							

RPM Kit	Contents	
<b>FastPrime™</b>		
RPM-589	*O-Rings	*Hardware kit
RPM-582	*Shaft Seal	*Liquifram
RPM-583	*Check Valve Cartridges	*Injection Valve Cartridge
RPM-584		
RPM-586	*Shaft Seal	*Hardware kit
	*Seal Ring Seats	*Liquifram
		*Clamp Rings
RPM-587	*Shaft Seal	*Hardware kit
	*Check Valve	*Liquifram

Accessories	
Part Number	Description
TNA40100	Degas Solenoid
TNA40200	Flow Verification
TNA40300	Leak Detection
TNP20200	Accessory Cable

\*PI 316 SS LE includes bleeder port

**TDx4**

**OUTPUT CODE 4** \_\_\_\_\_ 0.0 - 10.0 GPH (0.0 - 37.9 LPH); 100 psi (6.9 bar)

Drive End	Note: Cordsets from the accessories table may be required for the customer to connect to desired input/output.							151 SPM Max.
Control	Description							
TD094	Manual Control							
TD104	Advanced Pulse Input, Digital Inputs, Output Relays, Remote Start Stop, Tank Level Full Analog							
TD114	COMMs MODBUS TCP, RTU, Full Advanced							
TD124	COMMs PROFIBUS, Full Advanced							
Power Code	Voltage	Frequency		Plug				
1	Universal	50-60 HZ		110 - 120V US Plug				
2	Universal	50-60 HZ		220 - 240V US Plug				
3	Universal	50-60 HZ		220 - 240V DIN Plug				
5	Universal	50-60 HZ		220 - 240V UK Plug				
6	Universal	50-60 HZ		220-240V Aus/NZ Plug				
7	Universal	50-60 HZ		220-240V Swiss Plug				
Liquid End	Head	Fittings	Balls	Valve	Connections Suction/Discharge	Cartridge Valve or Seal Ring	RPM Kit	
FastPrime™ Machined								
579SI	Acrylic	PVDF	PTFE	MFV	PE 3/8" O.D.	Polyprel®	RPM-579	
579NI	Acrylic	PVDF	PTFE	-	PE 3/8" OD	Polyprel®	RPM-579	
579AI	Acrylic	PVDF	PTFE	-	PE 3/8" O.D.	Polyprel®	RPM-579	
579HI	Acrylic	PVDF	PTFE	MFV	PE 3/8" OD	Polyprel®	RPM-579	
577NP	316 SS	316 SS	316 SS	-	1/2" NPT	316 SS/PTFE/Polyprel®	RPM-577	
57VNP	316 SS	316 SS	316 SS	-	1/2" NPT	316 SS/PTFE/Viton	RPM-57V	
575SI	PP	PP	Ceramic	MFV	PE 3/8" OD	PTFE	RPM-573	
575NI	PP	PP	Ceramic	-	PE 3/8" O.D.	PTFE	RPM-573	
575AI	PP	PP	Ceramic	-	PE 3/8" OD	PTFE	RPM-573	
575HI	PP	PP	Ceramic	MFV	PE 3/8" O.D.	PTFE	RPM-573	
576VI	PP	PP	316 SS	-	PE .5" Vinyl .938"	PTFE	RPM-576	
576PI*	PP	PP	316 SS	-	PE .5" Vinyl .938"	PTFE	RPM-576	
FastPrime™ Molded								
572SI	PVDF	PVDF	Ceramic	MFV	PE 3/8" OD	Polyprel®	RPM-572	
572NI	PVDF	PVDF	Ceramic	-	PE 3/8" O.D.	Polyprel®	RPM-572	
572AI	PVDF	PVDF	Ceramic	-	PE 3/8" OD	Polyprel®	RPM-572	
572HI	PVDF	PVDF	Ceramic	MFV	PE 3/8" O.D.	Polyprel®	RPM-572	
574SI	PVDF	PVDF	Ceramic	MFV	PE 3/8" OD	PTFE/Polyprel®	RPM-574	
574NI	PVDF	PVDF	Ceramic	-	PE 3/8" O.D.	PTFE/Polyprel®	RPM-574	
574AI	PVDF	PVDF	Ceramic	-	PE 3/8" OD	PTFE/Polyprel®	RPM-574	
574HI	PVDF	PVDF	Ceramic	MFV	PE 3/8" O.D.	PTFE/Polyprel®	RPM-574	
573SI	PVDF	PVDF	Ceramic	MFV	PE 3/8" OD	PTFE	RPM-573	
573NI	PVDF	PVDF	Ceramic	-	PE 3/8" O.D.	PTFE	RPM-573	
573AI	PVDF	PVDF	Ceramic	-	PE 3/8" OD	PTFE	RPM-573	
573HI	PVDF	PVDF	Ceramic	MFV	PE 3/8" O.D.	PTFE	RPM-573	
TD104	1	- 579SI						

RPM Kit	Contents	
<b>FastPrime™</b>		
RPM-579	*O-Rings	*Hardware kit
RPM-572	*Shaft Seal	*Liquifram
RPM-573	*Check Valve Cartridges	*Injection Valve Cartridge
RPM-574		
RPM-57V		
RPM-576	*Shaft Seal	*Hardware kit
	*Seal Ring Seats	*Liquifram
		*Clamp Rings
RPM-577	*Shaft Seal	*Hardware kit
	*Check Valve	*Liquifram

Accessories	
Part Number	Description
TNA40100	Degas Solenoid
TNA40200	Flow Verification
TNA40300	Leak Detection
TNP20200	Accessory Cable

\*PI 316 SS LE includes bleeder port

**TDx5**
**OUTPUT CODE 5**

0.0 - 16.0 GPH (0.0 - 60.6 LPH); 75 psi (5.2 bar)

Drive End										
Control	Description									
TD095	Manual Control									
TD105	Advanced Pulse Input, Digital Inputs, Output Relays, Remote Start Stop, Tank Level Full Analog									
TD115	COMMs MODBUS TCP, RTU, Full Advanced									
TD125	COMMs PROFIBUS, Full Advanced									
Power Code	Voltage	Frequency						Plug		
1	Universal	50-60 HZ						110 - 120V US Plug		
2	Universal	50-60 HZ						220 - 240V US Plug		
3	Universal	50-60 HZ						220 - 240V DIN Plug		
5	Universal	50-60 HZ						220 - 240V UK Plug		
6	Universal	50-60 HZ						220-240V Aus/NZ Plug		
7	Universal	50-60 HZ						220-240V Swiss Plug		
	Liquid End	Head	Fittings	Balls	Valve	Connections	Suction/Discharge	Cartridge Valve or Seal Ring	RPM Kit	
<b>FastPrime™ Machined</b>										
569SI	Acrylic	PVDF	PTFE	PTFE	MFV	PE 3/8" O.D.		Polyprel®	RPM-569	
569NI	Acrylic	PVDF	PTFE	PTFE	-	PE 3/8" OD		Polyprel®	RPM-569	
569AI	Acrylic	PVDF	PTFE	-	-	PE 3/8" O.D.		Polyprel®	RPM-569	
569HI	Acrylic	PVDF	PTFE	MFV	MFV	PE 3/8" OD		Polyprel®	RPM-569	
567NP	316 SS	316 SS	316 SS	-	-	1/2" NPT		316 SS/PTFE/Polyprel®	RPM-567	
56VNP	316 SS	316 SS	316 SS	-	-	1/2" NPT		316 SS/PTFE/Viton	RPM-56V	
565SI	PP	PP	Ceramic	MFV	MFV	PE 3/8" OD		PTFE	RPM-563	
565NI	PP	PP	Ceramic	-	-	PE 3/8" O.D.		PTFE	RPM-563	
565AI	PP	PP	Ceramic	-	-	PE 3/8" OD		PTFE	RPM-563	
565HI	PP	PP	Ceramic	MFV	MFV	PE 3/8" O.D.		PTFE	RPM-563	
566VI	PP	PP	316 SS	-	-	PE .5" Vinyl .938"		PTFE	RPM-566	
566PI*	PP	PP	316 SS	-	-	PE .5" Vinyl .938"		PTFE	RPM-566	
<b>FastPrime™ Molded</b>										
562SI	PVDF	PVDF	Ceramic	MFV	MFV	PE 3/8" OD		Polyprel®	RPM-562	
562NI	PVDF	PVDF	Ceramic	-	-	PE 3/8" O.D.		Polyprel®	RPM-562	
562AI	PVDF	PVDF	Ceramic	-	-	PE 3/8" OD		Polyprel®	RPM-562	
562HI	PVDF	PVDF	Ceramic	MFV	MFV	PE 3/8" O.D.		Polyprel®	RPM-562	
564SI	PVDF	PVDF	Ceramic	MFV	MFV	PE 3/8" OD		PTFE/Polyprel®	RPM-564	
564NI	PVDF	PVDF	Ceramic	-	-	PE 3/8" O.D.		PTFE/Polyprel®	RPM-564	
564AI	PVDF	PVDF	Ceramic	-	-	PE 3/8" OD		PTFE/Polyprel®	RPM-564	
564HI	PVDF	PVDF	Ceramic	MFV	MFV	PE 3/8" O.D.		PTFE/Polyprel®	RPM-564	
563SI	PVDF	PVDF	Ceramic	MFV	MFV	PE 3/8" OD		PTFE	RPM-563	
563NI	PVDF	PVDF	Ceramic	-	-	PE 3/8" O.D.		PTFE	RPM-563	
563AI	PVDF	PVDF	Ceramic	-	-	PE 3/8" OD		PTFE	RPM-563	
563HI	PVDF	PVDF	Ceramic	MFV	MFV	PE 3/8" O.D.		PTFE	RPM-563	
<b>TD105</b>	<b>1</b>	<b>569SI</b>								

RPM Kit	Contents	
<b>FastPrime™</b>		
RPM-569	*O-Rings	*Hardware kit
RPM-562	*Shaft Seal	*Liquifram
RPM-563	*Check Valve Cartridges	*Injection Valve Cartridge
RPM-564		
RPM-56V		
RPM-566	*Shaft Seal	*Hardware kit
	*Seal Ring Seats	*Liquifram
		*Clamp Rings
RPM-567	*Shaft Seal	*Hardware kit
	*Check Valve	*Liquifram

Accessories	
Part Number	Description
TNA40100	Degas Solenoid
TNA40200	Flow Verification
TNA40300	Leak Detection
TNP20200	Accessory Cable

\*PI 316 SS LE includes bleeder port

Ingersoll Rand Inc. (NYSE:IR), driven by an entrepreneurial spirit and ownership mindset, is dedicated to helping make life better for our employees, customers and communities. Customers lean on us for our technology-driven excellence in mission-critical flow creation and industrial solutions across 40+ respected brands where our products and services excel in the most complex and harsh conditions. Our employees develop customers for life through their daily commitment to expertise, productivity and efficiency. For more information, visit [www.IRCO.com](http://www.IRCO.com)



Contact your local representative to find out more about LMI TD Series  
Chemical Injection Pumps

[www.lmipumps.com](http://www.lmipumps.com)

